

**MUNICIPAL SOLID WASTE
REGIONAL PLAN**

prepared for

**CLAY COUNTY
MUNICIPAL SOLID
WASTE REGION**

By

**ORAL SMITH & ASSOCIATES, INC.
203 DONELSON PIKE
NASHVILLE, TENNESSEE 37214**

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MUNICIPAL SOLID
WASTE REGION**

**As Required By The Solid Waste
Management Act of 1991**

July 1, 1994

**By
ORAL SMITH & ASSOCIATES, INC.
203 Donelson Pike
Nashville, Tennessee 37214**

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PART I
EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

RATIONALE FOR REGION FORMATION

In conformity with the "Solid Waste Management Act of 1991", the Clay County Solid Waste Region and its associated Solid Waste Planning Board was formed November 2, 1992 by resolution of the Clay County Commission. It was determined that it would be in the best interests of its citizens to form a single county region. Its purpose is to provide improved planning, aid in the establishment of an integrated Solid Waste Management System in the Region and assist in compliance with the aforementioned Solid Waste Management Act.

REGION DESCRIPTION

The Region consists of Clay County, Tennessee. The City of Celina is the only municipality contained within the Region. The total area of the Region is 236.1 square miles, with a 1993 projected population of 7,121.

The region is located in the Upper Cumberland area of Middle Tennessee and is bordered on the north by the State of Kentucky. It can be characterized as rural and has a persistently high poverty level.

SUMMARY OF NEEDS

A summary of the most important needs of the Region is given below:

- * *Increased Public Information and Education Regarding Solid Waste Issues,*
- * *Expansion and Promotion of Existing Recycling in the Region,*
- * *Education and Promotion of Source Reduction,*
- * *Establishment and Promotion of Individual Composting of Solid Waste in the Region,*
- * *Improvement to Current "Green Box System" to Meet State Required "Minimum Level of Service",*
- * *Improvement in Marketing of Recyclable Materials,*
- * *Education, and Increased Availability of Problem Waste Disposal Outlets.*

OBJECTIVES AND STRATEGIES

The objectives and strategies whereby the needs of the Region can be met are summarized and listed below:

- * *Establish the position of Regional Public Information and Education Director.* This will be a part-time position possibly combined with another county position. As can be surmised from the position's title, this individual will establish, oversee, and promote educational programs and materials regarding all facets of Solid Waste Management issues in the Region, such as recycling, problem wastes, source reduction and composting, as well as assisting in other Solid Waste Areas as may be determined.
- * *Establish the position of Regional Recycling Coordinator.* This also will be a part-time position. This person will work and coordinate with the Public Information and Education Director to expand and promote existing recycling efforts in the Region, as well as assist in record keeping and reporting.
- * *Establish a localized composting program in Celina and composting on an individual basis throughout the Region.* This will be under the direction of the Public Information and Education Director and will consist of Volunteer organizational and individual efforts.
- * *Establish State registered, manned convenience center.* By upgrading an existing location with use of State Grant Monies, and local "in-kind" match, the State required "minimum level of service" can be provided to the Region.
- * *Establish permanent, manned recycling drop-off center and recyclable processing center.* The purchase of recyclable material processing equipment such as a glass crusher, baler and scales can be accomplished with available grant funds and will make successful marketing of materials easier to accomplish.
- * *Establishment of tire storage site.* The County has initiated the process of the establishment of a tire storage site. This effort must be carried out to completion.
- * *Continue Household Hazardous Waste Collection Days.* The County has begun cooperation with the State H.H.W. collection program. This must be continued and promoted particularly through the efforts of the Public Information and Education Director.
- * *Analyze for Feasibility of Class IV Landfill.* Current data regarding the need for a Class IV Landfill is inadequate. The Region should initiate investigation of the feasibility of establishing a Class IV Construction and Demolition Waste Landfill in the Region. This could possibly involve

public/private cooperation on construction and operation of the site.

The City of Celina will continue its house-to house collection service.

COORDINATION WITH EXISTING SYSTEM

Given the single county status of the Region and the steps the County has already taken toward improving their solid waste management, coordination of the new programs, positions and facilities with the existing system should be relatively easy.

The Recycling Coordinator will initially coordinate and work with the existing "Visions Five" effort and coordinate closely with the Clay County Executive's office regarding existing and planned recycling efforts in the County.

The Public Information and Education Director also will work closely with the County Executive's office in establishing and carrying out the various areas of the Public Information and Education Director's duties.

The Regional Board members will continue to communicate and coordinate with the County during the performance of its duties through the County Executive, County Commission or other designated individuals or groups.

The new registered convenience center/recycling drop-off/processing center will be an upgrade of a presently manned green box recycling drop-off site and should make for a smooth transition. No other changes of locations for existing services are expected, therefore there will be little or no disruption of present service.

The proposed tire storage site to be located at the existing private landfill site should easily be integrated into the system since no additional County employees will be required and there are no concerns regarding site acquisition.

As initially stated, the proposed programs, positions and facilities should dovetail nicely with the existing system. Map 1-E illustrates the existing and proposed solid waste management system.

IMPLEMENTATION SCHEDULE

The proposed implementation schedule for the various aspects of the proposed solid waste management system is as given below.

IMPLEMENTATION SCHEDULE:

<u>Activity</u>	<u>Date</u>
Apply for Convenience Center Grants	March 1994
Apply for Recycling Equipment Grants	March 1994
Apply for Tire Storage Grant	March 1994
Submit Solid Waste Plan	July 1994
Hire Recycling/Public Info. Director(s)	October 1994
Tire Storage Site Completed	December 1994
Convenience Center/Recycling Center Completed	January 1995
Recycling/Composting/Solid Waste Source Reduction/Education Program Initiated	December 1994 -- 2003
Class IV Demolition Waste Landfill Study/Design	July 1995
Class IV Demolition Waste Landfill Opened	June 1996 ----- 2003
Annual Progress Reports and Updates	As required

BUDGET

Proposed ten year costs and revenue are shown in the following two tables:

Costs of Solid Waste System
(1994-2003)

EXPENDITURE CATEGORY	1994	1995	1996	1997	1998	1999	2000	2001	2003	2003
Collection and Transportation	172,454	177,628	182,956	188,445	194,099	199,921	205,919	212,097	218,459	255,013
*Disposal (private landfill)	73,928	74,928	109,800	109,800	109,800	113,094	116,486	119,981	123,581	127,288
Education	1,000	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
Recycling	0	3,000	3,045	3,090	3,137	3,184	3,232	3,280	3,329	3,379
Problem Wastes	0	1,100	1,100	1,133	1,167	1,202	1,238	1,275	1,343	1,353
Convenience Center/Recycling Center Improvements	80,000	0	0	0	0	0	0	0	0	0
Tire Storage Site Construction	10,000	0	0	0	0	0	0	0	0	0
TOTAL COSTS	337,382	264,156	304,401	309,968	315,703	324,901	334,425	344,133	354,182	364,533

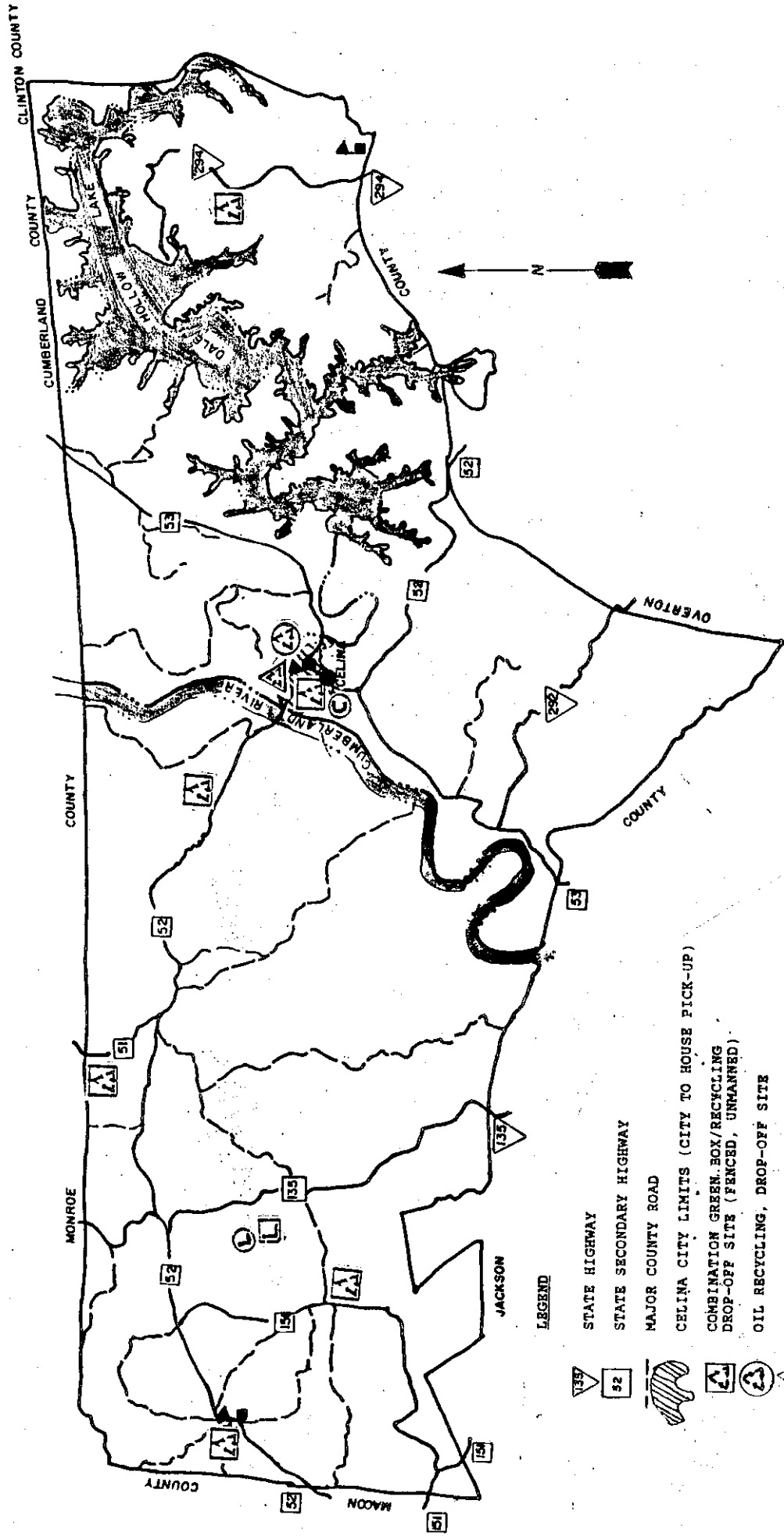
* Existing Contract Rate Expires in 1996

Revenues of Solid Waste System
(1994-2003)

REVENUE CATEGORY	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GENERAL SERVICE CHARGES:										
Tipping Fees	100,000	103,000	115,360	118,821	122,385	126,056	129,837	133,732	137,744	141,876
OTHER LOCAL REVENUE:										
Tax Base (general fund)	127,171	133,041	160,514	162,199	163,940	169,030	174,328	179,685	185,258	191,003
STATE OF TENNESSEE:										
Convenience Center Grant	50,000	0	0	0	0	0	0	0	0	0
Recycling Equipment Grant	20,000	0	0	0	0	0	0	0	0	0
Tire Storage Site Grant	10,000	0	0	0	0	0	0	0	0	0
Public Information & Education Grant		7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
TDOT Litter Grant	20,211	20,615	21,027	21,448	21,877	22,314	22,760	23,216	23,680	24,154
OTHER:										
TVA Recycling Grant	10,000	0	0	0	0	0	0	0	0	0
TOTAL REVENUES	337,382	264,156	304,401	309,968	315,703	324,901	334,425	344,133	354,182	364,533

PLANS ADOPTION AND IMPLEMENTATION

This plan has been developed and adopted by the Clay County Solid Waste Planning Board. The responsibility for implementing the plan rests solely with the Clay County Commission with the municipality of Celina continuing its present solid waste management duties. The plan has been amended to reflect appropriate comments received during the public hearings for this plan. The Clay County Commission has by resolution adopted this Solid Waste Regional Plan.



MAP I-E
EXISTING AND PROPOSED
SOLID WASTE
MANAGEMENT SYSTEM

- LEGEND**
- STATE HIGHWAY
 - STATE SECONDARY HIGHWAY
 - MAJOR COUNTY ROAD
 - CELINA CITY LIMITS (CITY TO HOUSE PICK-UP)
 - COMBINATION GREEN BOX/RECYCLING DROP-OFF SITE (FENCED, UNMANNED)
 - OIL RECYCLING, DROP-OFF SITE
 - RECYCLING DROP-OFF SITE
 - CLASS I PRIVATE LANDFILL (EXISTING)
 - EDUCATIONAL FACILITY
 - COMPOSTING SITE
 - CLASS IV LANDFILL
 - CONVENIENCE CENTER/RECYCLING DROP-OFF/PROCESSING SITE

NOTE: ALL AREAS OUTSIDE OF CELINA CITY LIMITS SERVED BY GREEN BOX DROP-OFF SITE.

PART II

CHAPTER I

**DESCRIPTION OF THE
MUNICIPAL SOLID WASTE
REGION**

CHAPTER I

DESCRIPTION OF THE MUNICIPAL SOLID WASTE REGION

GENERAL DESCRIPTION:

Clay County has adopted a single county planning region. The City of Celina is the only municipality located within the region.

The total area of the region is 236.1 square miles. The Cumberland River flows north to south through the approximate middle of the county. Dale Hollow Lake, which was formed by the damming of the Obey River, occupies a large portion of eastern Clay County. The river and lake approximately bisect the eastern portion of the county running east to west. The topography varies from gently rolling in the western one third of the county to very hilly in much of the rest of the county. The dominant land use is mainly agricultural with farming operations in suitable areas and primarily forested areas in the hilly areas. Transportation corridors within the county are limited due to the hilly terrain and river and lake locations.

See Map 1 for political boundaries, major roads and waterways of the Region.

RATIONALE FOR REGION FORMATION:

When considering information available at this time, Clay County feels that it is in the best interest of its citizens to become a single county municipal solid waste region. Clay County will continue to plan and cooperate with its neighbors in any way necessary to provide the most efficient and cost effective solid waste management system for its citizens.

INSTITUTIONAL STRUCTURE:

The Clay County Solid Waste Planning Region was created as required by The Solid Waste Management Act of 1991. One purpose of the Region was to prepare a solid waste regional

plan for Clay County in order to reduce its solid waste disposal per capita by twenty-five percent (25%) by December 31, 1996, and establish a planned capacity assurance of its solid waste disposal for a minimum ten (10) year period.

The Region has an elected Board of Directors. A majority of members of the Board constitutes a quorum for business transactions. The Board has three elected officers:

Chairman, Wayne Smith, who presides at all meetings,
Vice-Chairman, Cornell Smith, who serves as presiding officer in the absence of the Chairman,
Secretary, Dale Reagan, who calls the roll of meetings and takes minutes or oversees the taking of the minutes.

The Board has four members appointed by the County Executive and approved by the Board of County Commissioners. The city of Celina shall have a Board member appointed by the Mayor of Celina and approved by the city council of Celina.

The Board shall serve a six (6) year term except that Dale Reagan and Glen Watson appointed by the County Executive shall have a two (2) year term, that Wayne Smith appointed by the County Executive shall have a four (4) year term, that Cornell Smith, appointed by the County Executive shall have a six (6) year term, that Larry Head, appointed by the mayor of Celina shall have a four (4) year term.

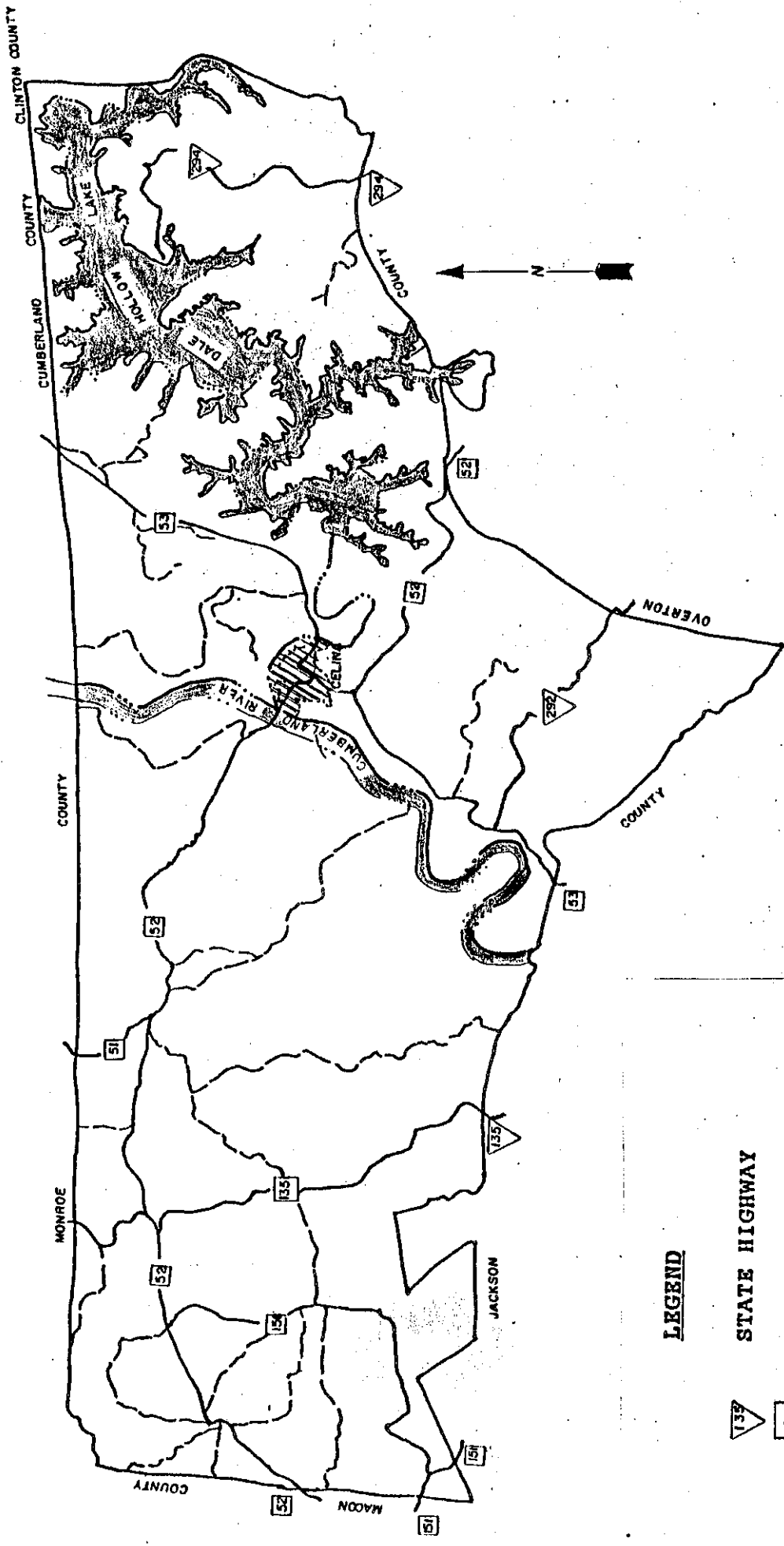
The Board provides an annual financial report of the Board's finances. Copies of the report are available to each member upon request. The Headquarters of the Region are in the Celina, Tennessee Courthouse. The public is allowed and encouraged to attend.

See Appendix A for additional information regarding the Board.





A solid waste advisory committee consisting of Coell Hickman, Donnie Long, and all current members of the Clay County Solid Waste Committee of the Clay County Commission was appointed by the Region Board. As elected officials with an inherent duty to represent the best interests of the public, the Solid Waste Committee provides a valuable resource in involving the Public in Board decisions. The other Committee members by virtue of experience and/or knowledge and role in the committee offer additional input for the Board's consideration.

An advertised public meeting for the purpose of receiving comments, questions and suggestions was held prior to the final adoption of the subject Solid Waste Regional Plan.

K E N T U C K Y



LEGEND

-  STATE HIGHWAY
-  STATE SECONDARY HIGHWAY
-  MAJOR COUNTY ROADS
-  CELINA CITY LIMITS

MAP 1

CLAY COUNTY SOLID WASTE REGION

DEMOGRAPHICS:

The 1993 population of the region according to U.S. Census Bureau projections is 7121, and its average population density is 30.2 persons per square mile.

Regional Data:

Regional Summary: Demographics

1. Name of Region: Clay County
2. Regional Population: 7121 (1993 projected)
3. Regional Area: 236.1 square miles
4. Population and Population Density

Table I-1
Population Density

County	Area (Sq. Miles)	Population	Avg. Density Population/sq miles
Clay	236.1	7121	30.2
Regional Total	236.1	7121	30.2

Table I-2
Urban/Rural Population Distribution

County	Urban Population	%	Rural Population	%
Clay	0	0	7121	100
Regional Total	0	0	7121	100

Table I-3
Population Distribution by Sex and Age

Age	Total	Male	%	Female	%
0-4	391	179	45.8	212	54.2
5-17	1,283	682	53.2	601	46.8
18-44	2,742	1,371	50.0	1,371	50.0
45-64	1,648	804	48.8	844	51.2
65+	1,174	531	45.2	643	54.8
Regional Total	7,238	3,567	49.3	3,671	50.7

Table I-4
Population Distribution by Education
Persons Aged 25 and Over

	Number	%
Less than 8th Grade	1,734	35.6
Grade 8	N/A	N/A
High School (1-4)	2,360	48.4
College (1-4)	658	13.5
Post Graduate/Professional (>4)	123	2.5
Regional Total	4,875	100.0

Total Number of Households in Region: 2,855

Table I-5
Distribution of Population by Type and Occupancy

	Total Persons	Occupied	Owner	Rented
Single Family				
1, Detached	5,210	5,210	4,440	770
1, Attached	74	74	38	36
Multi-Family				
2	87	87	11	76
3-4	34	34	2	32
5-9	57	57	57	0
10-19	71	71	0	0
20-49	0	0	0	0
50 or more	0	0	0	0
Institutional	80	N/A	N/A	N/A
Mobile Home/Trailer	1,557	1,557	1,303	254
Other	68	68	44	24
Regional Total	7,238			

Table I-6
Population Projections

County	Projection Year									
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Clay	7075	7049	6994	6952	6916	6874	6831	6786	6738	6692
Regional Total	7075	7049	6994	6952	6916	6874	6831	6786	6738	6692

ECONOMIC ACTIVITY:

According to the 1990 U.S. Census Bureau, Clay County has a population of 7,238. It is not in a Metropolitan Statistical Area (MSA) nor is it contiguous to an MSA. There are no interstate highways traversing the county.

The total highway miles in the county are as follows:

U.S. Primary Highways:	44.58	miles
U.S. Secondary Highways:	0.00	miles
State Highways:	24.38	miles
Other:	336.92	miles.

There is no major commercial or general aviation airport in the county. The Port of Celina on the Cumberland River is the only major waterway and port capable of supporting barge transport. There are no major rail routes or terminals in the county. The total employment in the county is 3,827 with the total earnings being \$52,429,000. The average per capita income is \$12,031. This is 68.4% of the average state per capita income and 57.3% of the average U.S. per capita income. Twenty-three (23.0) percent of the total population is officially below the U.S. poverty line. This county is one of Tennessee's persistent poverty counties. The overall distribution of non-agricultural employment is shown in Table I-8.

The total agricultural employment is 778. The major health care facilities include Clay County Manor in Celina with 66 beds and Clay County Hospital in Celina with 36 beds. The total appraised property value in Clay County in 1990 was \$34,433,820 with the last appraisal being in 1984. The Property tax rate is \$3.53 with the total revenues from property tax in 1991 being \$1,226,000. The municipality of Celina has a total assessed value of \$8,391,129 in 1984. The rate of \$1.54 produced \$120,000 in revenues. In 1991 the total sales subject to sales tax were \$27,165,627. The local sales tax of 1.00 produced a revenue of \$251,219. The county does not levy a wheel tax.

The following tables provide basic economic information, for each county, and the region in 1991.

Table I-7
Basic Economic Activity

County	Popu- lation	MSA County (yes/no)	Total Employment	Total Earnings 000's	Per Capita Income	% Population Below the Poverty Line
Clay	7238	no	3827	\$52,429	\$12,031	23.0
Regional Total	7238	no	3827	\$52,429	\$12,031	23.0

Table I-8
Non-Agricultural Employment

% of Total Employment

County	Manufacturing	Const.	Trade	Finance	Service	Govt.	Transportation Pub. Utilities
Clay	55.3	2.0	11.0	1.7	12.9	14.3	2.0
Region Total	55.3	2.0	11.0	1.7	12.9	14.3	2.0
%	55.3	2.0	11.0	1.7	12.9	14.3	2.0

Table I-9
Agricultural Employees

County	Employment
Clay	778
Regional Total	778

Table I-10
Commercial and Industrial Waste Generation

County	Screening Criteria Applied	Number of Generators	Estimated Total Quantity of Waste
Clay	10 or more employees	24	1903 Tons
Regional Total	10 or more employees	24	1903 Tons

Table I-11
Institutions Housing more than 100 Persons

County	Total Number of Institutions	Total Number of Students Prisoners/Residents	Estimated Quantity of Waste Generated
Clay	0	0	0
Regional Total	0	0	0

Table I-12
Major Health Care Facilities (larger than 50 beds)

County	No. of Facilities	No. of Beds	Infectious Waste Management OnSite/OffSite Type Treatment	Est. Quantity of Solid Waste Generated
Clay	1	66		Negligible
Region Total	1	66		Negligible

Table I-13
Sources of Local Revenue Utilized in the Region

County	Property Tax	Local Sales Tax	Wheel Tax	Local Waste Collection Fee	User Fee/Tipping Fee	Other
Clay	yes	yes	N/A	N/A	N/A	N/A
Region Total	yes	yes	no	no	no	no

Table I-14
Sources of Local Revenue for Fiscal 1991

County	Total Assessed Property Value	Total Property Tax Revenue	Total Sales Subject to Sales Tax	Total Local Sales Tax Revenue	# Registered Vehicles	Total Wheel Tax Revenue
Clay	\$34,433,820	\$1,226,000	\$7,165,627	\$251,219	N/A	N/A
Region Total	\$34,433,820	\$1,226,000	\$7,165,627	\$251,219	N/A	N/A

According to United States Census data, Clay County has exhibited a decrease in population over the past decade from 7676 in the year 1980 to 7238 in 1990. It is projected by the University of Tennessee Department of Sociology that this slight decrease in population will continue over the next ten years and possibly beyond. Therefore, present trends and projections indicate that demographic factors are not likely to have a significant impact on solid waste consideration.

There are no significant economic factors that are expected to affect future waste generation rates and quantities over the next ten years.

Future increased recreational activities on or near Dale Hollow Lake may result in slight increases in out-of-county visitors and associated waste generation in the eastern portion of the county. This increase will be offset by the loss of economic activity due to the projected population decrease. Presently there are no foreseeable influxes of economic activities projected for the next ten years that will be significant from a waste generation standpoint.

CHAPTER II

ANALYSIS OF THE CURRENT SOLID WASTE MANAGEMENT SYSTEM FOR THE REGION

CHAPTER II

ANALYSIS OF THE CURRENT

SOLID WASTE MANAGEMENT SYSTEM

FOR THE REGION

WASTE STREAM GENERATION AND CHARACTERIZATION:

In 1991, 3,807 tons of waste were collected for disposal in the Region.

Tables II-1 through II-5 give an overview of the current waste stream characterization.

Table II-1
Waste Disposed Per Capita

County	Tons Disposed	Population (1991)	Waste Disposed Per Capita
Clay	3,807	7,199	0.53
Regional Total	3,807	7,199	0.53

Table II-2
Distribution of Solid Waste by Source

TONS PER YEAR					
County	Residential	Institutional/ Commercial	Non-Hazardous Industrial	Special	Other
Clay	1,904	761	1,142	N/A	N/A
Regional Total	1,904	761	1,142	N/A	N/A

Table II-3
Acceptance of Certain Categories of Solid Waste for Disposal

County/ Facility	Yard Waste (Clippings- leaves-grass)		Sewage Sludge		Construction Demolition		Tires		*White Goods	
	Y/N	Qty	Y/N	Qty	Y/N	Qty	Y/N	Qty	Y/N	Qty
Clay	Y	negl.	N	0	N	0	N	0	N	0
Regional Total		negl.		0		0		0		0

* White Goods - discarded major appliances, such as refrigerators, ranges, etc.

Table II-4
Composition of Waste by Material

Waste Category	National %	Calculated Tons
Paper & paperboard	40.1	1,523
Glass	7.0	270
Ferrous Metals	6.5	247
Aluminum	1.4	53
Other Non-Ferrous Metals	0.6	23
Plastics	8.0	305
Rubber & Leather	2.5	95
Textiles	2.1	80
Wood	3.6	137
Food Waste	7.4	282
Yard Waste	17.6	670
Misc. Inorganic Waste	1.5	57
Other	1.7	65
TOTAL MUNICIPAL SOLID WASTE	100.0	3,807

Unmanaged Waste* includes the following:

**Table II-5
Unmanaged Wastes**

	Potential Waste Generation 1991	Actual Waste Disposed 1991	Unmanaged Waste 1991 (potential/actual)	Percent of Potential
<u>County</u>	<u>tpy</u>	<u>tpy</u>	<u>tpy</u>	<u>Total</u>
Clay	7,883	3,807	4,076	52%
<u>Region Total</u>	<u>7,883</u>	<u>3,807</u>	<u>4,076</u>	<u>52%</u>
* Wastes that are "outside" the collection system such as materials in roadside dumps, litter, etc.				

The reported figures were arrived at by using the national projections for waste composition percentages. Comprehensive studies have not been done in the Upper Cumberland in recent years. The potential maximum solid waste generation is 7,883 tons per year with the actual waste disposed of in 1991 being 3,807 tons. This leaves a potential of 4,076 tons of unmanaged solid waste or 52% of the potential total. One unauthorized dump (Pricetown) is known to local government authorities in the county. The primary constituents are furniture, tires, large appliances, junk cars and garbage. A county litter prevention program was funded, in part, by a state litter grant in the amount of \$17,105 in 1991. Coell Hickman is the responsible grant manager. The program utilizes prisoners with one man year round and a deputy during summer with the prisoners. Recovered materials are not recycled but sent to a landfill and counted in the total disposal figures. Another locally funded program to develop ways to prevent litter is the Visions Five.

Neither a sampling and analysis of the waste stream nor a formal survey of industrial and commercial generators has been performed.

Comprehensive studies of waste composition, by material, have not been done in the Upper Cumberland in recent years. There are no known circumstances which would indicate a significant difference between regional waste composition and national projections, therefore, national projections were used to represent the county waste composition percentages.

Tourism around Dale Hollow Lake could have a seasonal affect, however statistical data is not available. It is not expected that either quantity or composition due to

tourist activity would significantly impact planning during the next ten years.

WASTE COLLECTION AND TRANSPORTATION SYSTEMS:

Clay County, with a population of 7,238 (1990 census) has 2,855 households. County government does provide collection service, but does not contract with a private company. The municipality of Celina provides collection service, but does not contract with a private company. Celina does not provide services outside the city limits. Collection services available in the county include the following:

House-to-house pickup for 641 households in Celina
"Green Box" Drop off for 2,214 households.
The county has 2; 40 yard packer trucks. The city of Celina has 1; 16 yard packer truck.

Door-to-door collection serves 700 households and 18 businesses. The county does not operate a convenience center. The county does provide a "green box" collection service at 41 sites with 121 containers. The containers are emptied twice a week. The waste is disposed of in the Upper Cumberland Solid Waste Management Sanitary Landfill. The service area includes 236.1 square miles and serves 2855 households or the entire county including Celina. The average distance traveled by a householder to deliver waste to a green box site is 3 miles. In 1993, 16,175 cy of solid waste from Clay County and the City of Celina was transported to the Upper Cumberland Solid Waste Management Sanitary Landfill. The county does not have a schedule for phasing out its green box collection system.

With the exception of the municipality of Celina, all of Clay County is served by green box collection.

See Map 2 for location of all facilities and service areas in the region.

SOURCE REDUCTION AND RECYCLING SYSTEMS:

Currently the Visions Five Group has initiated a recycling collection program with drop-off sites. This is a private non-profit recycling collection system. Celina Recycling operates a private for-profit drop-off recycling collection system. Commercial recycling includes Crotty, Inc. Cardboard is recovered, baled and sold. Clay County has joined with five other counties to form Middle Tennessee Recyclers Marketing Cooperative to market recyclables for the Upper Cumberland Region.

Celina Recycling is a private recycling collection system in operation in Celina. It has permanent drop-off sites and collected 303.96 tons in 1991. There were 225.93 tons of copper, brass, radiators, copper/appliances, stainless,

batteries, steel, and sheet metal and 78.03 tons of aluminum collected and recovered for resale in 1991. There are two trailers used for collection of these materials. The site is attended 8-5 M-F and 8-12 Sat. Assistance is provided to unload and sort materials on collection days. Volume of collected materials is not reduced before transport and sale. Within the last 12 months, services have not been altered, reduced or expanded in response to changes in the market for recovered materials. There is some advertising in newspapers and radio to encourage participation in recycling programs.

The Visions Five Group is a private, non-profit recycling collection system. It has permanent drop-off sites and collected 1 1/2 tons in 1991. One and one-half tons of newsprint were collected for resale in 1991. Volume of materials is not reduced before transport and sale. Cardboard was collected at one time, but the market closed. Newspaper is brought in bags and stored in the basement of the Citizen Statesman Newspaper until pick-up. The drop-off site is permanent and is attended 8-4 Tuesday-Friday. Assistance in unloading and sorting materials is provided by newspaper employees. Receipts from sale of materials go to Brent Gore. There is some advertising in newspapers and education programs in schools.

Middle Tennessee Recyclers Marketing Cooperative has nine Convenience Center Locations open on Monday, Tuesday, Friday, and Saturday. It accepts glass, plastics, steel cans, aluminum, newsprint, paper, cardboard, motor oil, wooden pallets, and used appliances. Commercial and industrial initiatives at recycling include Crotty, Inc. where they collect, bale and sell cardboard.

See Map 2 for location of all recycling collection sites.

WASTE PROCESSING, COMPOSTING, AND WASTE-TO-ENERGY/INCINERATION SYSTEMS:

There are currently no known waste processing, significant composting, waste-to-energy or incineration systems active in the region.

**Table II-6
Regional Composting Facilities in the Region**

<u>County</u>	<u>Facility Location</u>	<u>Tons of Waste Processed/Yr</u>	<u>Composted Materials Tpy</u>		
			<u>Yard Waste</u>	<u>Sewage Sludge</u>	<u>Solid Waste</u>
Existing:					
Clay	N/A	0	0	0	0
Planned:					
Clay	TBD	77	77	0	0

No Waste-to-Energy or Incineration facilities are planned for the Region.

Municipal Solid Waste Incinerators or Waste-to-Energy Facilities in the region:

**Table II-7
Incinerators or Waste-to-Energy Facilities**

Operating Facilities:				
<u>County</u>	<u>Facility</u>	<u>Design Capacity tons/year</u>	<u>Current Use tons/year</u>	<u>Anticipated Operating Life of Facility</u>
Clay	N/A	0	0	0
Planned Facilities: None				

DISPOSAL FACILITIES - LANDFILLS AND BALEFILLS:

The Upper Cumberland Solid Waste Management Sanitary Landfill is a private Class 1 Municipal Landfill in operation near Union Hill, Tennessee in Clay County. It currently accepts approximately 38 tons per day and is open four days a week. It has a projected life expectancy of twelve years.

Existing and planned total regional disposal capacity for each of the next 10 years:

A study for the feasibility of establishing a new Class III and/or Class IV Landfill is recommended. Given the relatively low waste stream in the region, it is questionable as to whether the economics of construction and operating the facility would be feasible. There is, however, also the possibility of cooperating with another region or a public/private joint venture to establish the landfill.

Table II-8
Existing Municipal Solid Waste Landfills in the Region:

County	Name of Landfill	Location	Permitted Capacity (Acres)	Current Rate of Waste Accepted * (Tons/day)	Remaining Capacity (tons)
Clay	Upper Cumberland Solid Waste Management	Union Hill Clay Co	16.6	* 38	158,925
Regional Total			16.6	38	158,925
* based on 4 days/week					

Table II-9
Existing Landfills Expected to Close Before 2003

County	Location	Current Use (Tons/Day)	Current Annual Use (Tons/Year)	Anticipated Date of Closure
Clay	N/A			
Regional Total	N/A			

Table II-10
Planned Expansions and Planned New Class I Facilities
Which Will Operate for Ten Years or More

<u>County</u>	<u>Proposed Facility Expan. New</u>	<u>Loca- tion</u>	<u>When Will Capacity be Available</u>	<u>Permitted Capacity Sought (acre)</u>	<u>Design Rate of Waste (tpd) Disposed</u>	<u>Potential Expan- sion Yes/ No</u>
Clay	N/A					
Planned New Regional Capacity: None						

Table II-11
Total Existing and Planned Capacity in the Region
at the Close of the Next Ten Years

<u>Year</u>	<u>TONS</u>		
	<u>Existing</u>	<u>Planned</u>	<u>Total</u>
FY 1993	158,925	0	158,925
FY 1994	149,331	0	149,331
FY 1995	140,009	0	140,009
FY 1996	130,580	0	130,580
FY 1997	121,038	0	121,038
FY 1998	111,378	0	111,378
FY 1999	101,598	0	101,598
FY 2000	91,697	0	91,697
FY 2001	81,672	0	81,672
FY 2002	71,519	0	71,519
FY 2003	61,239	0	61,239

See Map 2 for location of all disposal facilities.

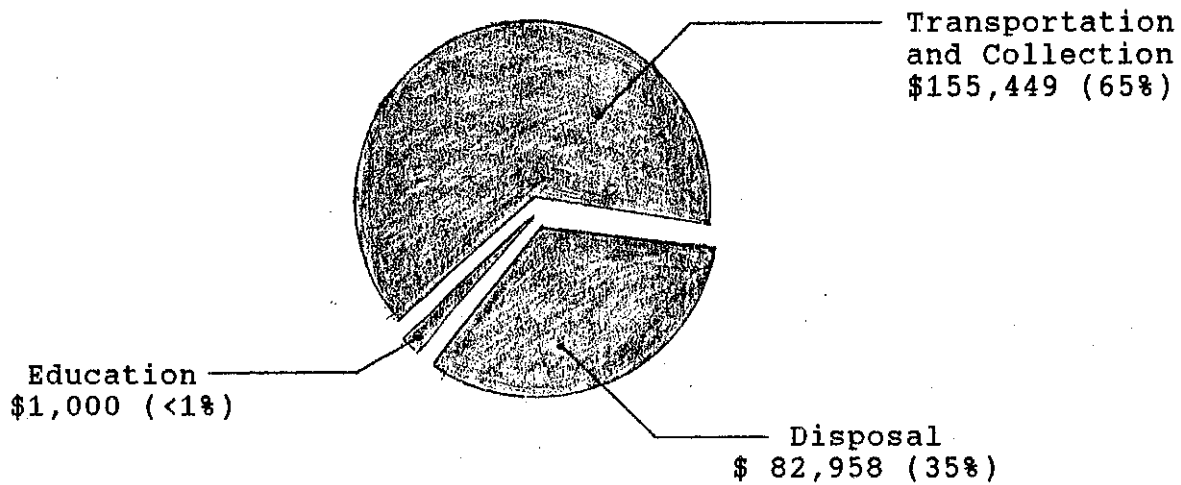
COSTS OF THE CURRENT SYSTEM:

The 1993 costs incurred for all solid waste management activities in the region are given below in Table II-12 and graphically shown in Figure II-1.

Table II-12
1993 Costs of Solid Waste Management System

Transportation and Collection	\$154,449
Disposal	82,958
Intermediate Processing & Handling	0
Recycling and Composting	0
Education	1,000
Problem Wastes	0
TOTAL	\$238,407

Figure II-1
1993 Costs of Solid Waste Management System



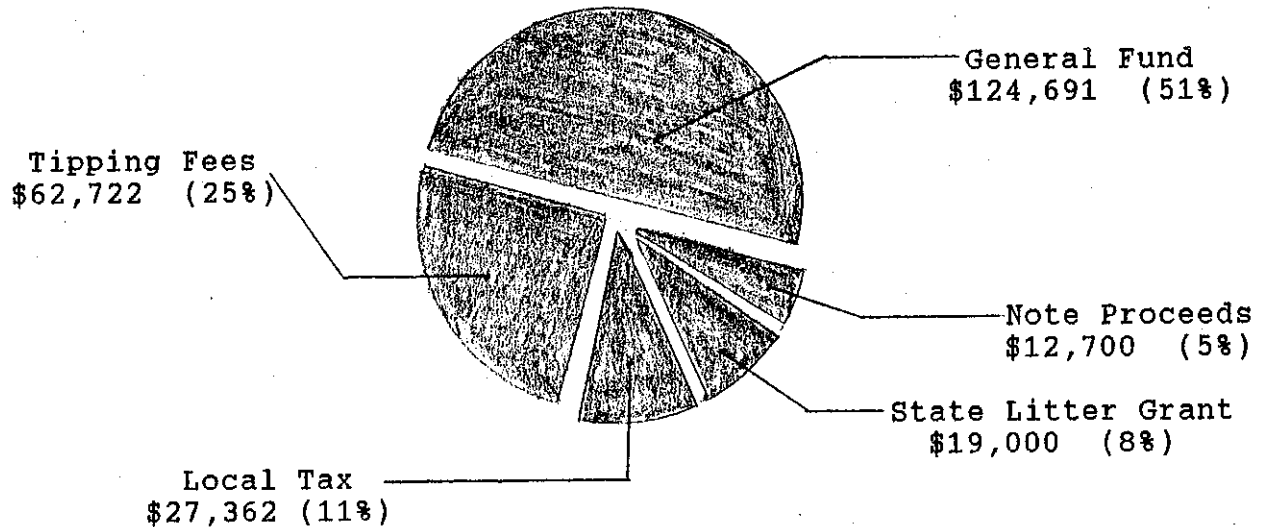
REVENUES:

The 1993 revenues for operation of the region's solid waste management system are given below in Table II-13 and graphically shown in Figure II-2.

Table II-13
1993 Revenues of Solid Waste Management System

Tipping Fees	\$62,722
Local Taxes	27,362
Note Proceeds	12,700
Operating Transfers (General Fund)	124,691
State Litter Grant	19,000
TOTAL	\$246,475

Figure II-2
1993 Revenues For Solid Waste Management System



PUBLIC INFORMATION AND EDUCATION PROGRAMS:

Clay County does not employ a public works information/ education staff person nor does it sponsor a recycling program. The newspaper, Citizen Statesman, with a circulation of 2,500 does publish articles regarding solid waste and recycling. The Vision's Five organization does conduct educational programs. There is a "Clean Tennessee" program in the county with its major education program being "Adopt a Highway" (20 miles). The Vision's Five has a planned program with receive trailer and educational materials (fall '92). A pamphlet advertising the Middle Tennessee Recyclers Marketing Cooperative has been sent to schools in Clay County.

Indicate the location of any school, or community-based educational programs on the regional system map.

See Map 2 for existing school locations in the Region.

PROBLEM WASTES:

See Chapter X.

STRENGTHS AND WEAKNESSES OF EXISTING SYSTEM:

The Clay County Solid Waste Planning Region consisting of Clay County and the City of Celina is a relatively small, primarily rural region with a solid waste production of approximately 2500 tons per year. The solid waste stream composition is not known to differ substantially from national averages.

Currently the Region needs to develop a recyclable processing center and solid waste convenience center. According to the Tennessee Department of Environment and Conservation Division of Solid Waste Management RULE 1200-1-7-.10 CONVENIENCE CENTERS, Clay County shall require one (1) convenience center in order to meet the minimum required level of service. The county is currently developing plans for a central convenience center which will meet all applicable requirements. While manned sites are definitely preferred, the county will also continue to provide eight (8) other fenced locations throughout the county which contain green boxes for solid waste drop off and recycling materials collection. The municipality of Celina provides door-to-door pickup for all its residents. As can be seen by the placement of the green box collection sites, a solid waste drop off site and recyclable collection location is located within a reasonable distance of all citizens of the Region.

A definite strength of the system is the presence of an existing landfill in the Region. A private, Class I Sanitary Landfill is owned and operated by Upper Cumberland Solid Waste Management and is located in the Region in eastern Clay County and is also available for direct disposal at commercial rates.

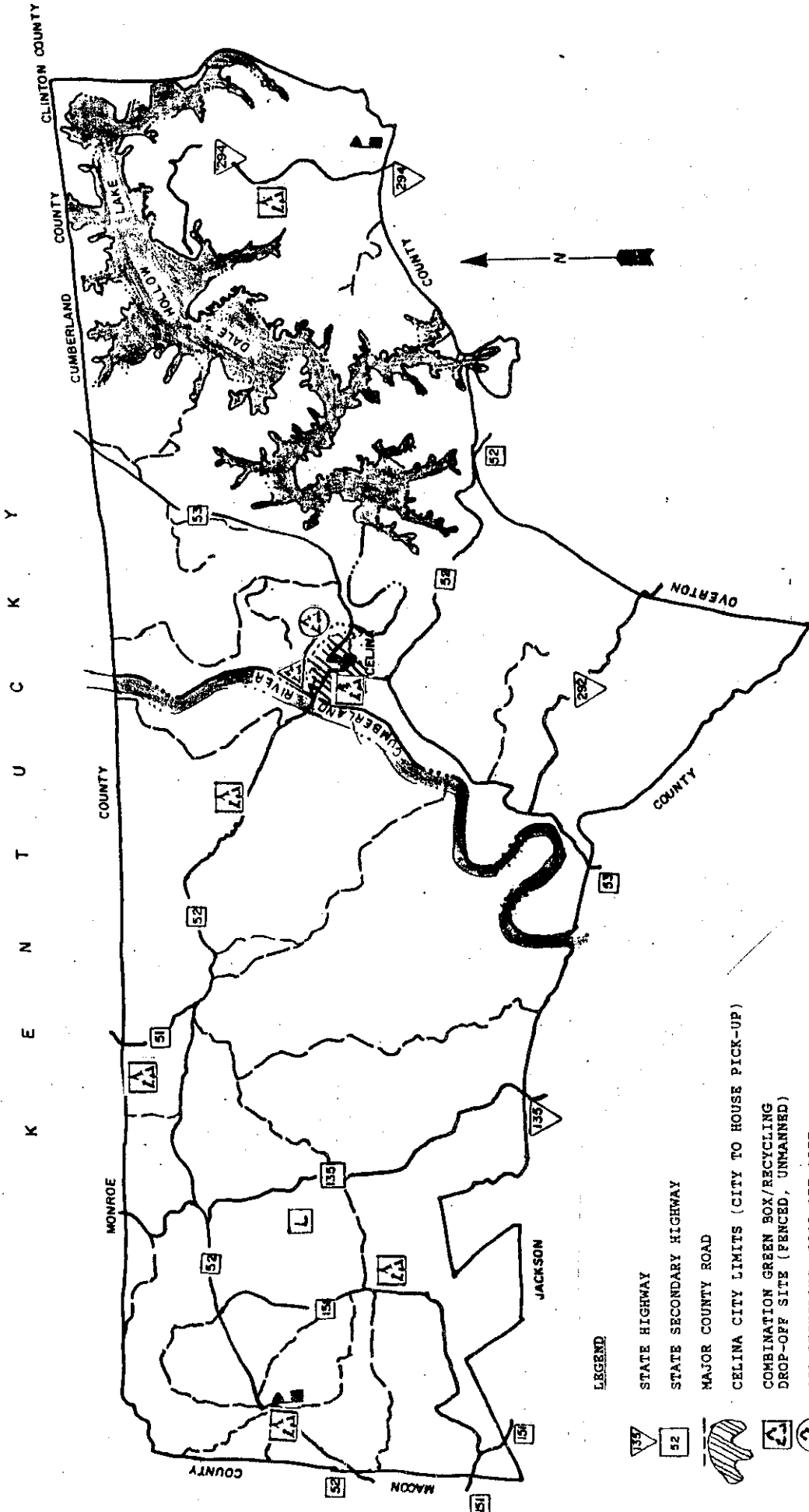
The landfill has a projected life in excess of ten (10) years, therefore a surplus capacity is available for the next ten years. Assuming disposal charges remain competitive, it is not likely that the Region would require a waste processing and treatment facility or an additional sanitary landfill in the Region during the planning period. The existing landfill is relatively new, opened December 1992, and is in compliance with applicable D.E.C. Division of Solid Waste Management requirements for operation.

A tire storage location is needed and is being planned for the storage of tires until grinding and final disposal is accomplished. A tentative site has been selected as shown on the map. Increased education regarding recycling and solid waste reduction is needed to help the region meet the 25% reduction goal. Given the relatively small quantity of recyclable materials produced in the Region, it is important that the Region continue to support and expand its participation in cooperative efforts with other counties such as the Middle Tennessee Recyclers Marketing Cooperative which is composed of Clay, Fentress, Jackson, Overton and Pickett counties.

The region has made great steps in establishing recycling opportunities recently in the Region. This beginning needs to be built, opened, and expanded in order to be as effective as is reasonably possible.

Increased education regarding all facets of solid waste management issues is needed to assist the general public in understanding the costs and benefits involved in complying with State and Federal Regulations and in providing a safe, modern, environmentally sound collection and disposal system for the people of the Region.













If a Class III/Class IV Disposal Facility could be developed, it would be beneficial in terms of saving Class I Landfill space and meeting waste reduction goals. It is presently unknown whether or not it would be financially feasible as a stand-alone facility in this region.



MAP 2

EXISTING SOLID WASTE MANAGEMENT SYSTEM

LEGEND

-  STATE HIGHWAY
 -  STATE SECONDARY HIGHWAY
 -  MAJOR COUNTY ROAD
 -  CELINA CITY LIMITS (CITY TO HOUSE PICK-UP)
 -  COMBINATION GREEN BOX/RECYCLING DROP-OFF SITE (FENCED, UNMANNED)
 -  OIL RECYCLING, DROP-OFF SITE
 -  RECYCLING DROP-OFF SITE
 -  CLASS I PRIVATE LANDFILL (EXISTING)
 -  EDUCATIONAL FACILITY
 -  COMPOSTING SITE
 -  CLASS IV LANDFILL
 -  CONVENIENCE CENTER/RECYCLING DROP-OFF/PROCESSING SITE
- NOTE: ALL AREAS OUTSIDE OF CELINA CITY LIMITS SERVED BY GREEN BOX / DROP-OFF SITE.

CHAPTER III

GROWTH TRENDS, WASTE PROJECTIONS AND PRELIMINARY SYSTEM STRUCTURE

CHAPTER III

GROWTH TRENDS, WASTE PROJECTIONS AND PRELIMINARY SYSTEM STRUCTURE

The Clay County Solid Waste Planning Region is a single county region, therefore all projections and trends refer to Clay County only.

According to county records and information contained in the District Needs Assessment, the quantity of solid waste collected for treatment or disposal in 1991 (= "generation") was 3,807 tons. Also, for the same year the population was projected to be 7,206. The empirical per capita waste generation rate for the year 1991 is calculated as follows:

$$\frac{\text{Total quantity of waste (tons)}}{\text{population (persons)}} = \text{per capita generation (tons/person/year)}$$

using the figures given for year 1991,

$$\frac{3,807 \text{ tons}}{7,206} = 0.53 \text{ tons/person/year}$$

For purposes of projections it is assumed that the per capita generation rate due to population will remain constant during the planning period.

Table III-1
Per Capita Solid Waste Generation

County	Total Waste Disposed in FY 1993	Projected Population 1993	Annual Per Capita Generation Tons/Person/Year
Clay	3,774	7,121	.53
Total	3,774	7,121	.53

Using the per capita generation rate calculated above and the population projections from Table I-6 the Regional quantity of solid waste requiring disposal is given in Table III-2.

Table III-2

Quantity of Solid Waste Requiring Disposal (tons)

County	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Clay	3750	3736	3707	3685	3665	3643	3621	3597	3571	3547
Total	3750	3736	3707	3685	3665	3643	3621	3597	3571	3547

Projections of the quantity of solid waste requiring disposal in the region for each year adjusted for population and economic growth require the following assumption. Solid waste generation is related to total economic performance. The state-wide economic growth rate can be used as an approximation to calculate incremental increases in the quantity of waste requiring disposal in each of the projection years.

The University of Tennessee Center for Business and Economic Research forecasts that the inflation adjusted state product "will grow at 3.2% compound annual rate" between 1990 and 1999.

The information given in Table III-3 for each subject year is calculated as follows:

$$\begin{aligned}
 & \text{Tons of Solid Waste (from Table III-2)} \\
 + & \text{ Tons of Solid Waste (from Table III-2) } \times 0.032 \quad \text{as discussed above)} \\
 = & \text{ Quantity of Solid Waste Requiring Disposal (in tons)} \\
 & \text{ Adjusted for Population and Economic Growth}
 \end{aligned}$$

Table III-3

Solid Waste Generation (in tons)
Adjusted for Population and Economic Growth

County	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Clay	3870	3856	3826	3803	3782	3760	3736	3712	3685	3661
Total	3870	3856	3826	3803	3782	3760	3736	3712	3685	3661

Table III-4
Solid Waste Generation (in tons) Adjusted for Population
Changes Economic Growth, and Waste Reduction and Recycling

County	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Clay	3599	3200	2870	2852	2836	2820	2802	2784	2767	2746
Total	3599	3200	2870	2852	2836	2820	2802	2784	2767	2746

PRELIMINARY SYSTEM DESIGN:

Preliminary system management methods include:

- * Continuation of House to House pick-up in Celina
- * Establishment of manned and registered convenience center (minimum 1)
- * Continuation of operation of fenced "green box" sites
- * Continue and expand solid waste and recycling education efforts

Preliminary solid waste handling and disposal methods include:

<u>Activity</u>	<u>% Solid Waste Stream</u>
Source Reduction	0-3%
Small, Low-end Type Composting Program for Celina	1-4%
Divert to Class III/IV Landfill	2-6%
Recycling (Drop-off Centers)	15-20%
Landfilling (Class I)	67-75%

EVALUATION CRITERIA FOR THE REGION:

In evaluating the various available options for the Region's solid waste management system, each option must be evaluated for its need, economic feasibility, compatibility with existing and other proposed elements of the plan, regulatory requirements, public acceptance and local governmental acceptance of the proposed option.

All reasonable alternatives for meeting the various needs of the system should be examined in light of the aforementioned criteria.

Table III-5

Solid Waste Generation Adjusted for
Waste Imports or Exports (in tons/year)

County	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Clay	10,054	10,166	10,266	10,375	10,489	10,603	10,719	10,838	10,957	11,081
Total	10,054	10,166	10,266	10,375	10,489	10,603	10,719	10,838	10,957	11,081

Table III-6

Solid Waste Generation Adjusted
for All Applicable Factors (in tons/year)

County	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Clay	9,903	9,630	9,429	9,542	9,660	9,780	9,901	10,025	10,153	10,280
Total	9,903	9,630	9,429	9,542	9,660	9,780	9,901	10,025	10,153	10,280

CHAPTER IV
WASTE REDUCTION

CHAPTER IV

WASTE REDUCTION

ESTABLISHING A BASE YEAR QUANTITY:

According to the University of Tennessee Report entitled "Managing Our Waste: Solid Waste Planning in Tennessee," published in February 1991, the population of Clay County in 1989 was 7900 and the solid waste generated and disposed of was 3751 tons.

Table IV-1
Population and Quantities of Waste Disposed of Base Year 1989

County	1989 Population	1989 Total Waste Disposed (tons)
Clay	7900	3751
Regional Total	7900	3751

The regional per capita waste disposal rate is determined by using the following formula:

$$\frac{\text{Total waste disposed or incinerated (tons)}}{\text{Total Regional Population}} = \text{Regional Annual Per Capita Waste Disposal (tons/person/year)}$$

For the base year, under consideration, 1989:

$$\frac{3751 \text{ tons}}{7900 \text{ persons}} = 0.474 \text{ tons/person/year}$$

1995 WASTE REDUCTION PER CAPITA DISPOSAL GOAL:

The value of a 25% reduction in the per capita quantity of waste disposed in tons/person/year is calculated using the following formula:

$$\begin{array}{l} \text{Average 1989 per capita rate} \times 0.25 = \text{Target 1995 per} \\ \text{(tons/person/year)} \qquad \qquad \qquad \text{capita reduction} \\ \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \text{(tons/person/year)} \end{array}$$

$$0.474 \text{ tons/person/year} \times 0.25 = 0.1185 \text{ ton/person/year}$$

1995 Target Reduction Determination (tons/year)

$$\text{1995 target per capita reduction (tons/person/year)} \times \text{1995 population (persons)} = \text{1995 target reduction in tons/year}$$

$$0.1185 \text{ tons/person/year} \times 7049 \text{ (persons)} = 835.3 \text{ tons/year}$$

REGIONAL WASTE REDUCTION GOAL:

It is the long term goal of the Clay County Solid Waste Planning Region to reduce and minimize to the greatest extent financially feasible and practical, the amount of solid waste produced in the region and disposed of at municipal solid waste facilities within the region. Specifically, it is the short term objective of this region to reduce by twenty-five percent (25%) the amount of solid waste disposed of based upon a regional per capita production and disposal rate by weight.

A quantitative projection of allocation of the 1995 waste reduction target by material, by economic sector, and by year is shown in Tables IV-2, IV-3 and IV-4 respectively.

Table IV-2
Projected Waste Reduction by December 31, 1995

Waste Category	Percent Material	Total Waste Generation	Waste Reduction of Total Waste	Tons Reduced
Paper & paperboard(1)	40.1	1534	14.0%	536
Glass	7.0	268	1.8%	69
Ferrous Metals	6.5	249	1.0%	38
Aluminum	1.4	54	<1.0%	22
Other Non-Ferrous Metals	0.6	23	0%	0
Plastics	8.0	306	2.4%	92
Rubber & Leather	2.5	96	<1.0%	10
Textiles	2.1	80	0%	0
Wood	3.6	138	<1.0%	7
Food Waste	7.4	283	<1.0%	14
Yard Waste	17.6	673	4.0%	156
Misc. Inorganic Waste	1.5	57	<1.0%	6
Other	1.7	65	<1.0%	6
REGION	100	3826	25%	956

Table IV-3
Projected Waste Reduction by Economic Sector
by December 31, 1995

Residential % Tons	Commercial/Institutional % Tons	Industrial % Tons	Total Reduction
23% 220	45% 430	32% 305	955

Table IV-4
Projected Waste Reduction (Tons)

Tons	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Per Year	271	655	956	951	946	940	934	928	921	915
Per Day	0.7	1.8	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5

Description of the strategy that will be used to meet the target amount:

No significant source reduction or recycling programs contributed to a reduction of the solid waste disposed of prior to the base year under consideration, therefore;

Prior Waste Credit = 0 tons

See Chapter VI for estimated recycling recovery amounts.

No regulatory bans of components of the waste stream to be processed or diverted to other classes of disposal are currently proposed. This decision will be reviewed at appropriate intervals if a Class IV landfill can be located in the region in the future.

Economic incentives or disincentives are not proposed for the region given the current make-up and quantity of the region's waste generation. Should industrial or commercial generation change substantially, a review of this decision should be made and appropriate action taken if any is justified.

No additional waste reduction strategies are proposed for implementation that are not addressed in other chapters.

No other waste reduction strategies are currently under consideration.

IMPLEMENTATION, BUDGET AND REPORTING:

Waste reduction, strategies, schedules and budgets are addressed in Chapters VI, VII and IX.

The Region will receive annual reports from the County and the municipality of Celina, and will compile information for annual progress reports to the State as is required.

CHAPTER V
WASTE COLLECTION AND
TRANSPORTATION

CHAPTER V

WASTE COLLECTION AND TRANSPORTATION

EXISTING COLLECTION AND TRANSPORTATION SYSTEM:

At present the Clay County Solid Waste Planning Region does not have a convenience center which complies with all of the requirements of Rule 1200-1-7-.10 governing Convenience Centers as established by the Tennessee Solid Waste Disposal Control Board.

RULE 1200-1-7-.10 CONVENIENCE CENTERS

(1) Purpose

- (a) This rule shall establish the minimum level of service which every county must provide in order to assure that all residents of a county are provided with collection and disposal service.
- (b) This rule shall establish minimum standards for the design and operation of convenience centers if such service is selected by a county.

(2) Minimum level of service

- (a) Household collection - A county shall be deemed to have met minimum level of service if at least ninety percent (90%) of all residents have access to household collection.
- (b) Convenience centers - A county shall be deemed to have a minimum level of service if convenience centers are established as provided in this subparagraph. Each county must have at least one convenience center unless a higher level of service is provided.

Since neither household collection nor a convenience center conforming to Rule 1200-1-7-.10 is in place, the Region currently does not meet the requirements for the rule defined "Minimum Level of Service".

As described in Chapter II, numerous fenced "green box" locations are strategically placed throughout the county and are available for use, but they are unmanned and do not conform with the design requirements for convenience centers.

Individual house to house weekly trash pickup is available and utilized within the city of Celina, where the density of residents make such a system feasible.

Also, commercial and industrial establishments are served by on-site pickup with trash can size and frequency of pickup variable as needed.

REGION COLLECTION AND TRANSPORTATION NEEDS:

In order to meet a "minimum level of service" for the county the county must provide at least one convenience center unless a higher level of service is provided.

RULE 12000-1-7-.10 CONVENIENCE CENTERS

(2) (b) (I) (ii) The minimum number of centers shall be established as follows:

(I) The service area in square miles divided by one hundred eighty square miles (180 mi.²); or

(II) The service area population divided by 12,000.

According to the applicable portions of the rule, Clay County, having a population of 7121, requires one convenience center to meet a minimum level of service for the region.

As shown, therefore, based upon the portions of the rule for convenience centers cited above only one convenience center is required. However, due to the travel length, up to 17 miles ±, and time required, as much as 30 minutes, for many residents to reach this one center, assuming it is centrally located in the county, one can reasonably argue that it will not be as fully utilized as it would be if it were more readily accessible to the majority of residents in the region.

Therefore, in order to meet the region's need for local drop-off sites, continued operation of the other existing "green box" sites or "unmanned convenience centers" will be needed throughout the county, until such time as they can be manned.

Transportation needs are being met by existing vehicles.

MEETING COLLECTION AND TRANSPORTATION NEEDS:

Based upon current population projections (see chapter I) and total regional needs, it is the goal and objective of the Clay County Solid Waste Planning Region to:

- * Provide a convenience center for the region which will fully comply with State Solid Waste Board rules regarding the required number, design and operation.
- * Continue to provide localized waste collection sites "green box sites"
- * Continue improvements on existing collection sites.
- * Establish additional manned convenience centers (long term)

Given the low population density (30.2 persons/sq. mile), it is not now, nor is it projected within the next ten years to be economically feasible to pursue house to house waste collection. Therefore, improvements to waste collection and/or transportation for the region are in general limited to those areas of convenience to users such as accessibility, availability and ease of use and the efficient transport of the waste.

The existing green box sites' operating hours 7:00 A.M. to 7:00 P.M. on Mondays, Tuesdays, Wednesdays, Fridays and Saturdays have by past operating experience proved to be quite adequate in terms of user access. With few exceptions waste has been contained to the available cans indicating an adequate number of waste storage containers (cans) per site. This is an area that can be monitored on an on-going basis and additional waste containers placed at sites where they are needed. Likewise underutilized containers can be moved from their locations to where they are needed more.

Physical site improvements such as fencing and all-weather traffic surfacing, be it crushed stone or a higher grade of pavement, are a necessity and will require on-going maintenance.

The existing collection center located in Celina has been selected for upgrading to meet all rule requirements for convenience centers.

It is expected that the upgrade will include improvements to the personnel facilities, new roof and heating, and waste handling capabilities as well as site improvement such as fencing, drainage control (as may be necessary) and other miscellaneous improvements. The condition of the vehicles used by the county and the city should be regularly maintained and evaluated on an annual basis for need of replacement. At present no additional vehicles or replacement vehicles are needed. For the purpose of planning, assuming normal wear the City of Celina should expect to replace their truck in five years, 1999 and the county should do the same in seven years, 2001. Due to the small number of vehicles under consideration (2 + 1 backup) and the wide variance in "useful life" a particular vehicle can have, dependant upon amount of usage, care of operation and maintenance, the actual replacement date

could vary greatly. It is not projected that additional vehicles will be required to maintain the expected level of service to be supplied throughout the planning period.

Due to the proximity of a private Class I landfill within the region, and the relatively low volumes of solid waste under consideration, transfer stations and/or processing facilities for more economical hauling of large waste amounts over considerable distances are not attractive for this region.

All convenience centers, both manned and unmanned, will also be equipped with bins for collection of recyclable materials. The manned convenience center to be located in Celina will also be the main recycling center for the region. See Chapter VI for further details regarding recycling.

STAFFING AND TRAINING:

Since there is an existing private Class I sanitary landfill in the planning region area, neither the municipality of Celina nor Clay County anticipates or proposes opening their own Class I landfill in the planning period. Therefore, staffing and training needs, as may be required by law, will be limited to that of collection and transportation and operating the convenience center. No additional personnel beyond that which are currently working in city and county sanitation departments are proposed.

Should a Class IV Landfill be developed and operated in the future by the County, then operator training would also be required.

COLLECTION AND TRANSPORTATION BUDGET:

The state registered convenience center will be financed by a \$50,000.00 state grant. The county will provide a 10% match in the form of in-kind work by means of supplying a county owned building and site. Operation, maintenance, salaries and other expenses will be funded by both tipping fees and operating transfers from the city's and county's respective general fund.

**Table V-1
Collection and Transportation Budget**

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Convenience Center Construction	* \$50,000									
** Collection & Transportation	203,877	209,993	216,293	222,782	229,465	236,349	243,440	250,742	258,265	266,013

* State Convenience Center Grant

** Combined City and County

Notes:

Funds from: Tipping Fees (49%)

General Fund (41%)

Litter Grant (10%)

IMPLEMENTATION SCHEDULE:

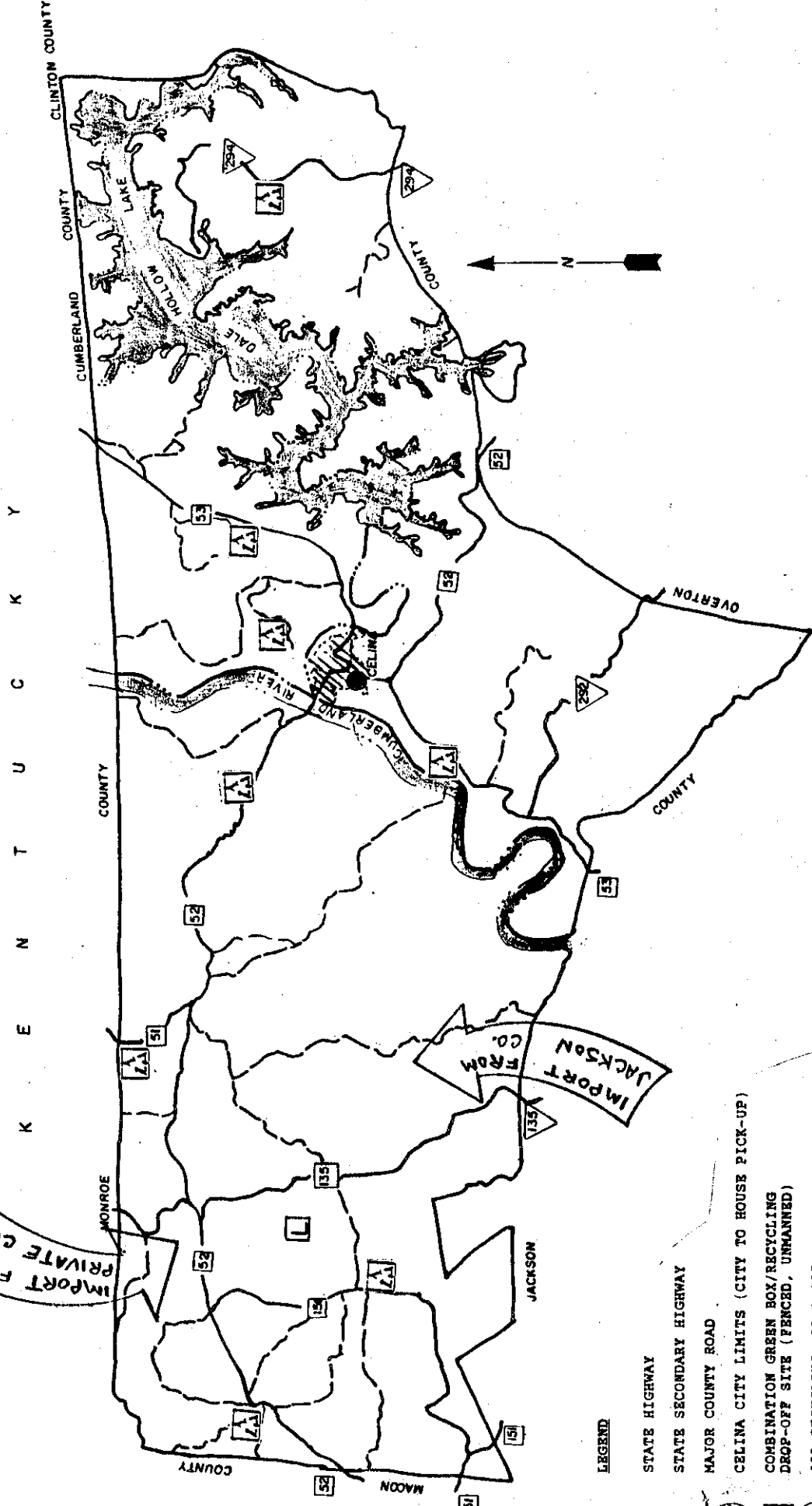
**Table V-2
Implementation Schedule for Convenience Center**

Activity	1994				1995				1996 ---- 2003			
	1	2	3	4	1	2	3	4	1	2	3	4
Apply for C.C. Grant	X											
Design		X										
Bidding/Negotiation		X	X									
Construction			X	X								
Training				X								
Operation					X							
Record & Reports				X								













REGIONAL RESPONSIBILITIES:

Clay County as a single county region will be responsible for implementing the aspects of this plan to comply with state laws.

See Map 3 for the location of existing and proposed elements of the collection and transportation system.



MAP 3
COLLECTION AND TRANSPORTATION
MANAGEMENT SYSTEM

- LEGEND**
-  STATE HIGHWAY
 -  STATE SECONDARY HIGHWAY
 -  MAJOR COUNTY ROAD
 -  CELINA CITY LIMITS (CITY TO HOUSE PICK-UP)
 -  COMBINATION GREEN BOX/RECYCLING DROP-OFF SITE (FENCED, UNMANNED)
 -  OIL RECYCLING, DROP-OFF SITE
 -  RECYCLING DROP-OFF SITE
 -  CLASS I PRIVATE LANDFILL (EXISTING)
 -  EDUCATIONAL FACILITY
 -  COMPOSTING SITE
 -  CLASS IV LANDFILL
 -  CONVENIENCE CENTER/RECYCLING DROP-OFF/PROCESSING SITE

NOTE: ALL AREAS OUTSIDE OF CELINA CITY LIMITS SERVED BY GREEN BOX DROP-OFF SITE.

CHAPTER VI
RECYCLING

CHAPTER VI

RECYCLING

REGIONAL NEEDS:

The regional recycling needs for the Clay County Solid Waste Region include the following:

- * *Increased Public Education Involvement and Awareness of available opportunities for recycling within the county.*
- * *A manned, accessible site for receiving and temporarily storing recyclable material.*
- * *A Glass Crusher, Baler and Scales for processing and preparing the materials for market.*
- * *A Regional Recycling Coordinator (Part-time position)*

OBJECTIVES AND STRATEGIES:

It is the objective of the Region to promote and increase participation in recycling programs and the use of recycled materials by commercial, industrial and residential customers and solid waste generators. It is also the goal to improve existing recycling programs, assist in development of new markets for recyclable materials and reduce to the least amount economically feasible the quantity of recyclable material that is disposed of by landfilling in the region.

The entire county is currently served by drop-off of recyclable materials at nine unmanned, fenced sites throughout the county. The Proposed Recycling Coordinator and the Public Information and Education Director should work together with civic and neighborhood groups and commercial establishments to encourage volunteer groups within smaller communities to establish small localized sites, such as local gas or grocery stores for collection of selected recyclable materials which could be transported to the existing convenience centers by volunteer assistance.

By its participation in the Middle Tennessee Recyclers Marketing Cooperative, Clay County is seeking to expand the types of plastic which can be accepted for recycling.

Markets for textiles and plastic-wood composites are also being sought and studied respectively.

It is proposed that the county will continue to be served by the drop-off at convenience center type system. The drop off sites are spread throughout the county at nine separate locations. The prohibitive costs associated with curb side recyclable collection and similar systems make it financially unfeasible for a rural county such as Clay with its low population density. It is expected that this type of system will continue to serve the region for the next ten years or more.

The drop-off collection site recycling system is expected to serve the 2,855 households and businesses within the region.

It is estimated that approximately 17% of the total waste stream generated in Clay County can be collected and diverted from landfills.

The service area will include the entire county, and as mentioned above will be served by drop-off type collection centers.

RECYCLABLE COLLECTION SITES:

Recyclable materials collection centers have been established at and combined with fenced solid waste "green box" sites throughout the county. The location of the sites are as follows:

1. Pea Ridge on Highway 53
2. Clay County Industrial Park
3. Walker Hill at old Quarry
4. Moss on Hwy 51 toward Tompkinsville
5. Hermitage Springs near school
6. Mount Vernon at old school site
7. East End at Day's Grocery
8. Free Hills
9. Old County Highway Garage in Celina

The site listed as number 9 above will be upgraded, improved and manned to comply with T.C.A. 68-31-836(a). The other sites will remain unmanned.

RECYCLABLE PROCESSING AND MARKETING:

Site number 9 listed above is the recycling center currently proposed for improvements. It will also become the regional processing center for many recovered materials. The recycling center will be fenced and staffed for security and customer assistance. Bins will be provided for convenient deposit of materials.

Presently proposed for the recyclable processing center are the purchase of a glass crusher capable of processing three to four tons per hour, reducing it to cullet size for transport to markets. A hand fed, vertical baler for compaction of steel cans, aluminum, plastics, newspaper, office paper and cardboard will also be purchased. Platform scales, minimum 4' x 4' in size with a 5,000 lb. weight capacity and digital indicator will be obtained and used for weighing the processed materials, prior to shipment to markets.

Clay County is one of the founding members of the Middle Tennessee Recyclers Marketing Cooperative, which presently consists of Clay, Fentress, Jackson, Overton and Pickett Counties. It is expected that the Clay County Solid Waste Region will continue to cooperate and coordinate with this cooperative to enhance and maximize its ability to provide marketable recyclable materials in sufficient quantities to remain economically viable. The completion of the recyclable processing center currently proposed for the region will also improve the economics of temporarily storing and transporting the recyclable materials.

The Clay County Region will interact with the Office of Cooperative Marketing through its involvement with the Middle Tennessee Recyclers Marketing Cooperative. The Clay County Regional Recycling Coordinator shall also seek information and assistance from the Office of Cooperative Marketing as may be available to assist Clay County in furthering its marketing goals for recyclable materials.

The use and specification of recovered materials and products by government offices will be encouraged whenever possible, however a new purchasing and/or procurement policy is not proposed at this time.

Clay County through its participation with the five county member Middle Tennessee Recyclers Marketing Cooperative is providing assistance and working for the development of a plastic injection molding plant which would take co-mingled plastics one through seven, for the production of coat hangers or similar products.

RECYCLING EDUCATION:

See Chapter IX for a description of programs for education of both children and adults about source reduction and recycling.

STAFFING, BUDGETING AND FUNDING:

The only additional employee specifically required by recycling operations in The Clay County Solid Waste Region will be a part-time Recycling Coordinator. It is possible that this position might be combined with The Public

Information and Education Director position or other existing county position. A Budget sum of \$3,000 per year shall be allocated for the Part-time Recycling Coordinator position and expenses. Existing County office and equipment will be utilized and/or shared with other personnel. Other recycling operations will be performed by county employees as part of their existing duties in other solid waste operations in the County.

Initial planned funding for recycling efforts in Clay County will include substantial amounts from available grants for purchase of equipment and recycling/solid waste convenience center building improvement.

Recycling Equipment	\$20,000	(State recycling equipment
and Facilities:		Grant)
	10,000	(TVA Grant)
	50,000	(State Convenience Center
		Grant)
	5,000	(In-kind Local Match)
Salary:	3,000	(County General Fund)

The recycling coordinator shall gather and maintain current data and records on recycled and recovered materials within the region and compile them annually as necessary for preparation of required annual state reports which will be submitted by the County Executive's Office.

PUBLIC/PRIVATE RECYCLING COORDINATION:

The Recycling Coordinator will maintain information on public and private sector recycling organizations, both for-profit and non-profit organizations, in order to promote and identify areas which will mutually benefit all concerned parties and help meet recycling goals for the Region. These areas can include increased recycling public awareness and education, use of processing equipment, and/or cooperation in transportation of recyclable materials to markets. Coordination can help prevent unnecessary duplication of services in well served areas, as well as assistance in identifying additional possible markets for materials.

IMPLEMENTATION:

It shall initially be the responsibility of the county governing body to approve the plan with any necessary amendments and provide such funding as necessary for the carrying out of subsequent portions of the plan. Upon this action it shall be the responsibility of the Recycling Coordinator, working under the oversight and approval of the Solid Waste Regional Board and County Commissioners respectively, to implement the identified elements of this Chapter.

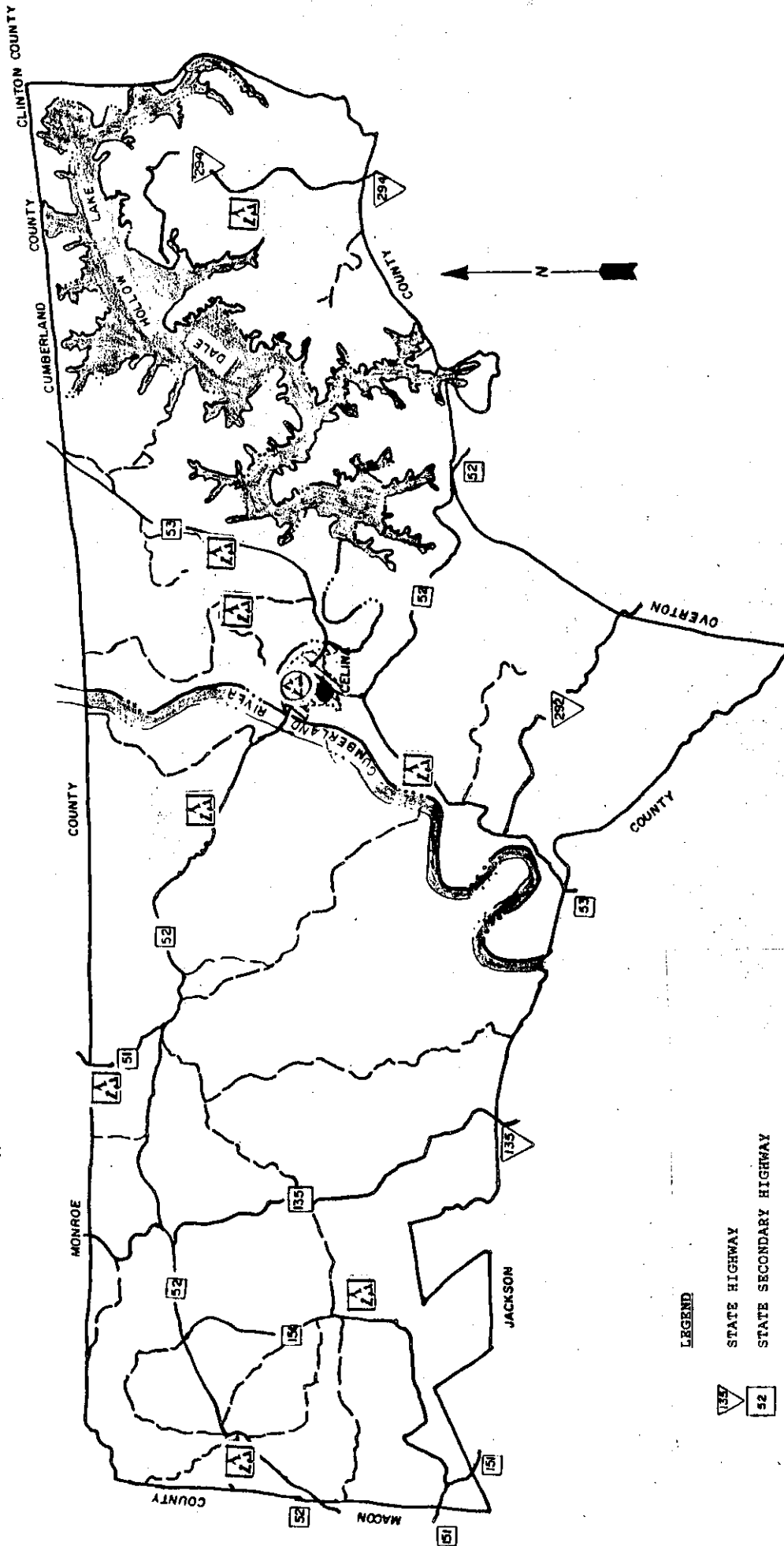
**Table VI-1
Implementation Schedule**

Activity	1994				1995				1996				-----	2003
	1	2	3	4	1	2	3	4	1	2	3	4		
Apply for Recycling Center Equipment	X													
Design		X												
Bidding/Negotiation		X												
Construction/Training				X										
Operation					X									
Staff Recycling Coordinator				X										
Continue Visions 5 Recycling Program	X													

RECYCLING FACILITIES:

See Map 4 for the location of existing and planned recycling programs, services, and facilities that will constitute the regional recycling infrastructure, on the composite system map.

K E N T U C K Y



LEGEND



STATE HIGHWAY



STATE SECONDARY HIGHWAY



MAJOR COUNTY ROAD

CELINA CITY LIMITS (CITY TO HOUSE PICK-UP)



COMBINATION GREEN BOX/RECYCLING
DROP-OFF SITE (FENCED, UNMANNED)



OIL RECYCLING, DROP-OFF SITE



CONVENIENCE CENTER/RECYCLING DROP-OFF/PROCESSING SITE

MAP 4

RECYCLING SITES

CHAPTER VII

COMPOSTING, SOLID WASTE PROCESSING, WASTE-TO-ENERGY AND INCINERATION CAPACITY

CHAPTER VIII
DISPOSAL CAPACITY

CHAPTER VII

COMPOSTING, SOLID WASTE PROCESSING WASTE-TO-ENERGY AND INCINERATION CAPACITY

CAPACITY NEEDS:

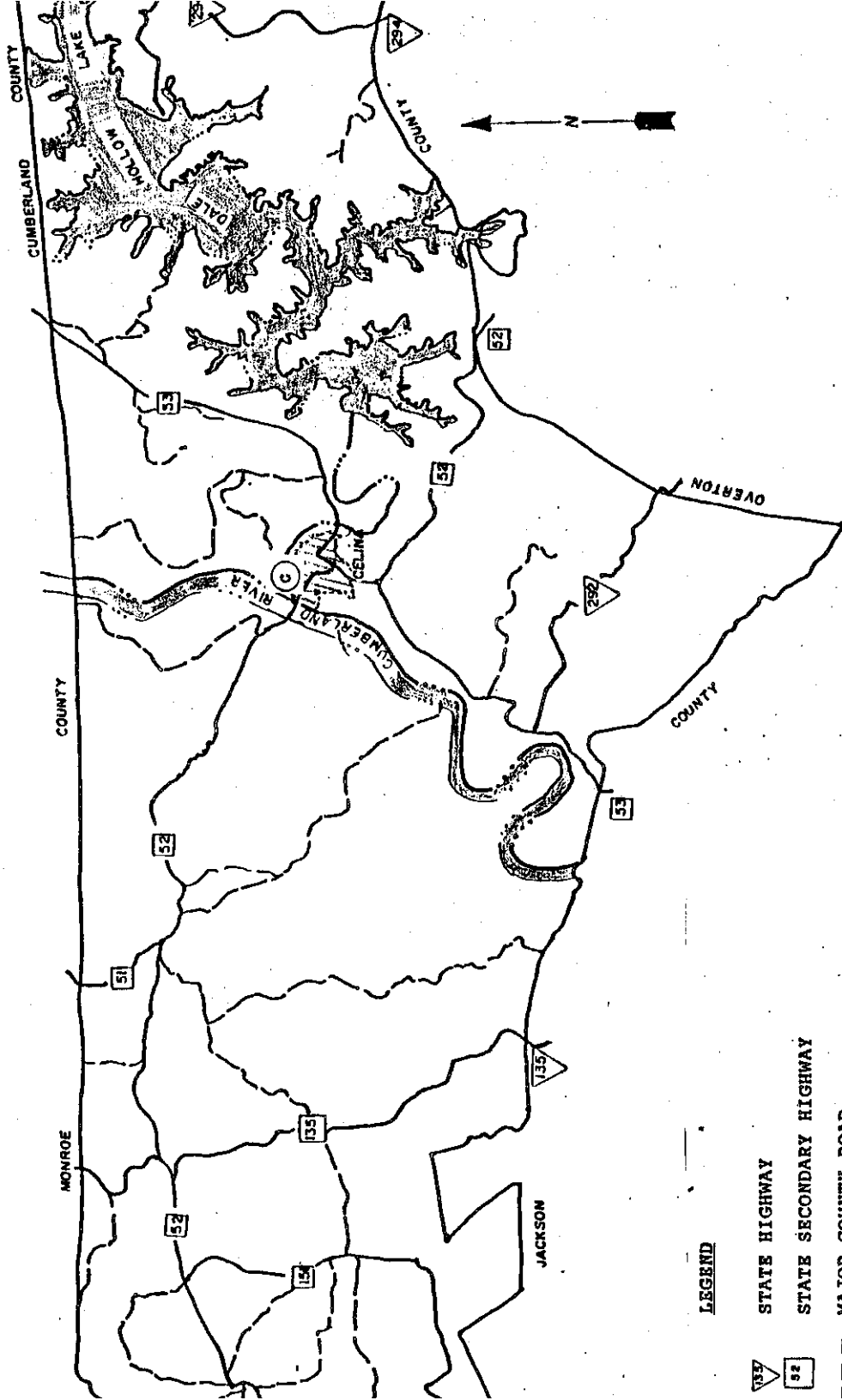
Based on the information present in Chapter II and Chapter III of this Plan, there is not a current or projected need sufficient to justify a constructed composting, solid waste processing or incineration facilities. This lack of need is due to the rural nature of the majority of the region. According to reports from the landfill operator, it is rare that any yard waste such as clipped grass, bagged leaves or tree branches is brought to the landfill for disposal. Likewise, this subject region's waste production would not economically support a typical waste-to-energy type facility.

There is, however, opportunity for the development of a small, simplistic, composting program which could serve the City of Celina. Also, increased backyard composting of yard and food wastes can be accomplished by increased educational programs.

OBJECTIVES AND STRATEGIES:

It is the objective of the Region to increase the use of small individual backyard type composting and establish a small composting program to be located in Celina. The materials would be primarily yard wastes, food wastes and some paper products. The compost would be free to the citizens of Celina and Clay County for gardens, flower beds, etc. Residual amounts of material would be negligible and would be landfilled. The program would be voluntary, assisted by City personnel. Training materials and education would be provided by the Public Information and Education Director. No revenues or expenses would be expected to be generated or incurred. The program could be implemented as soon as the Public Information and Education Director could establish volunteer assistance and location be provided, (approximately second quarter of 1995).

K E N T U C K Y



LEGEND



STATE HIGHWAY



STATE SECONDARY HIGHWAY



MAJOR COUNTY ROAD



CELINA CITY LIMITS (CITY TO HOUSE PICK-UP)



COMPOSTING SITE

MAP
COMPOSTING

CHAPTER VIII

DISPOSAL CAPACITY

CLASS I DISPOSAL CAPACITY:

Based upon current records and projections there is excess solid waste disposal capacity for the Clay County Solid Waste Planning Region during the 10 year planning period. (See Tables VIII-1 and VIII-2).

The landfill utilized by the region is a private Class I sanitary landfill owned and operated by Upper Cumberland Solid Waste Management located on Moore Road near the Union Hill community in eastern Clay County. The landfill opened in December 1992. Current remaining landfill capacity is conservatively estimated at 154,000 tons.

Prior to the opening of the existing private landfill in Clay County, contractual agreement was executed by and between Clay County and the owner of the landfill. The purpose of the agreement was to set forth terms and conditions for Clay County agreeing to use the landfill for its solid waste disposal. As assurance to the county that disposal capacity would remain available to the county for a significant time period, it was agreed that the landfill would restrict the waste received to a 100 mile radius of the landfill and would limit the amount of solid waste received for disposal to 15,000 tons per year for the operating life of the landfill. Also agreed was that the landfill would accept up to 5,000 tons per year of solid waste from Clay county during the life of the landfill assuming costs for service were agreeable to both parties.

Given the aforementioned existing agreement and the projected waste generation rates in the region, it would appear that available regional disposal capacity exceeds the projected required amount and that the currently existing agreement should protect the region's capacity for the next ten years.

As always, unforeseeable factors or events could occur which would significantly increase waste generation in the region or even decrease available storage capacity. The Planning Region Board should use annual report information and communicate closely with the City of Celina officials, Clay County

officials, and private landfill Owner to gather information regarding remaining disposal capacity and current solid waste generation rates. Approximately four years before the projected closure date for the landfill the board shall investigate possible disposal capacity options, current Regional Planning information and shall initiate planning meetings with appropriate City and County government personnel to discuss the need for additional storage capacity.

There is excess capacity available in the Region, therefore, a new landfill is not projected to be required in the planning period. No implementation steps are required.

See Map 6 for existing landfill location.

IMPORTED WASTE:

As can be determined by subtracting the figures corresponding to the appropriate year in Table III-4 from those in Table III-8, a significant portion of the solid waste disposal of in the private landfill is imported from out of the region. The majority of the import waste comes from adjoining Jackson County, Tennessee and a private firm in Monroe County, Kentucky. Projected surplus disposal capacities are shown on Tables VIII-1 and VIII-2.

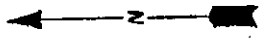
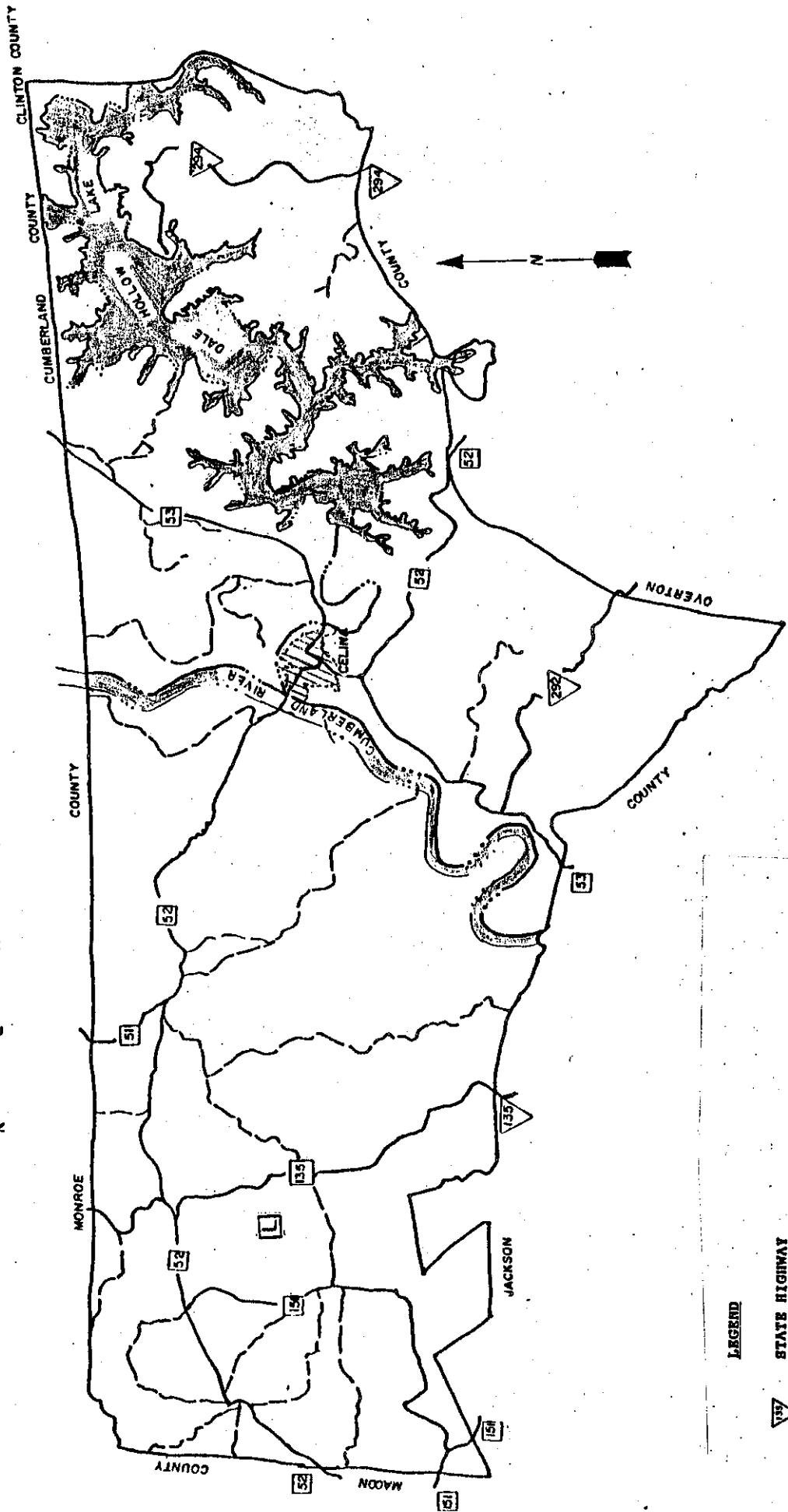
A copy of the agreement between Clay County, Tennessee and Cornell Smith, landfill owner is included in Appendix D.

**Table VIII-1
Projected Class I Capacity
(Tons Per Year)**






County: Clay				
Year	* DEMAND: Tons of Waste Requiring Disposal	SUPPLY: Existing & Planned Capacity	Surplus (+)	Shortfall (-)
1993	10,075	169,000	158,925	
1994	10,054	158,925	148,871	
1995	10,166	148,871	138,705	
1996	10,266	138,705	128,439	
1997	10,375	128,439	118,064	
1998	10,489	118,064	107,575	
1999	10,603	107,575	96,972	
2000	10,719	96,972	86,253	
2001	10,838	86,253	75,415	
2002	10,957	75,415	64,458	
2003	11,081	64,458	53,377	

* Does not reflect proposed waste reduction in Region, therefore surplus is a conservative estimate.

K E N T U C K Y



LEGEND

-  STATE HIGHWAY
-  STATE SECONDARY HIGHWAY
-  MAJOR COUNTY ROAD
-  CELINA CITY LIMITS (CITY TO HOUSE PICK-UP)
-  CLASS I PRIVATE LANDFILL (EXISTING)

MAP 6

CLASS I LANDFILL SITE

CHAPTER IX
PUBLIC INFORMATION
AND EDUCATION

CHAPTER X
PROBLEM WASTES

CHAPTER IX

PUBLIC INFORMATION AND EDUCATION

PUBLIC INFORMATION AND EDUCATION NEEDS:

A substantial effort will be required to educate and provide necessary public information regarding solid waste issues. Historically there has been a lack of available and convenient recycling programs within the region, and disposal rates for solid waste have been relatively low due to more lax landfill regulations than are now in force. The environmental consequences of previous disposal practices have not been sufficiently examined and considered in many decision making processes until recently. These factors have contributed to the establishment of many long held attitudes and actions that will not be easy to change without significant promotion of source reduction, recycling and proper solid waste disposal education. There is, therefore, a significant need for public information and education programs in the Region.

GOALS AND OBJECTIVES:

Regional goals and objectives include:

- * *Promoting recycling*
- * *Promoting source reduction*
- * *Increased information and education to all target audiences regarding proper solid waste disposal options and techniques.*

Target groups and audiences include:

- * *Schools, children, and educational facilities*
- * *Households*
- * *Industrial and commercial facilities*
- * *Church and civic groups*

The kind of information to be provided should specifically address available recycling programs in the region identifying location, hours of operation, type of materials to be accepted, price (if any) to be paid for the material(s), any special requirements or preparation of recyclable material(s) necessary for drop-off. Information shall also be provided concerning specific

events, exhibits, or demonstrations concerning recycling and/or source reduction. Information should be provided on current state laws concerning 25% waste reduction goals as well as the costs of solid waste disposal options.

METHODS AND STRATEGIES:

The methods to meet the identified needs in the region are as follows:

- * *School based instruction* should include periodic, (approximately three times per school year), distribution of flyers concerning available recycling centers, locations, hours of operation, materials which are accepted, etc.
- * *Adequate notice of available area workshops, conferences and training courses* shall be sent to appropriate individuals or groups such as school administrators, governmental officials, commercial and industrial solid waste generators.
- * *Appropriate audio-visual materials, slides and videos* concerning solid waste and recycling issues shall be utilized when available at reasonable or no cost. They shall be used for presentations or joint use with exhibits and demonstrations for public presentations such as at county fairs, etc. or for individual group presentations such as civic groups, managers for industrial and commercial solid waste generators.
- * *Publications* covering a wide variety of solid waste issues such as source reduction, recycling, and household hazardous waste collection should be regularly distributed to all target groups and audiences. Public notices should be regularly posted in public buildings and cooperating private offices and stores.
- * *Contests and awards* are recommended for school age children and may take the form of poster contests, and/or recycling competitions between schools or classes in the same school. Promotion of a "Green Week" or "Recycling Awareness Week" by joint cooperation of private and public groups should be arranged culminating in the presentation of awards for contest winners. Local merchants should be contacted for donations of prizes or services.
- * *Exhibits and/or demonstrations* concerning solid waste and recycling issues should be presented as available. In particular the Public Information Director should seek out and schedule exhibits such as the traveling "Partners for Recycling" exhibit which consists of public-private partnership responsible for making a forty-five foot, trailer exhibit illustrating solid

waste management by encouraging source reduction, recycling, composting and landfill education. Exhibits should be scheduled to reach as many members of the target audiences as possible.

Two helpful sources of Public Information and Education are:

Getting the Word Out!
A Guide to Publicity

Let's Reduce and Recycle!
Curriculum for Solid Waste Awareness

New Jersey Dept. of
Environmental Protection
Office of Recycling
101 Commerce Street
Newark, NJ 07102
(201) 648-6295

EPA/530-SW-90-005
August 1990
U.S.E.D.A.

STAFF, BUDGETING AND FUNDING:

It is recommended that a part-time Solid Waste Public Information and Education Director position be established. This position may be combined with the Regional Recycling Coordinator position if an individual candidate suitable for both positions is available. The Director will communicate closely with the Recycling Coordinator, local government officials, and other appropriate individuals and groups and shall direct and assist in scheduling, arranging and distributing public information and education efforts within the Clay County Solid Waste Planning Region.

Projected budget needs are as follows:

Salary:	\$5500
Expenses and printing:	2000
Equipment & Office needs	(Utilize existing county facilities)
	<u>\$7500</u>

Funding for the plan should be by State Educational Program Grant.

EVALUATION AND REPORTING:

The Clay County Commission and Clay County Solid Waste Board shall oversee and evaluate Public Information and Education Director activities and programs for success in meeting identified needs. The Public Information and Education Director shall maintain records and prepare reports as may be required.

The following implementation schedule should be implemented, by the County, expanded and continued in greater detail by the Public Information and Education Director when detailed portions of the program are established.

Table IX-1
Implementation Schedule
Public Information and Education Implementation Schedule

Activity	1994				1995				1996				1997				1998				1999-2003					
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
Apply for State Grant				X																						
Evaluate Staff Needs			XXXX																							
Fill Staff Positions					XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
Initiate Program					XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
Evaluate Program Progress							XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX

CHAPTER X

PROBLEM WASTES

HOUSEHOLD HAZARDOUS WASTE (HHW):

1. No detailed information regarding quantity or composition of household hazardous waste for the Clay County Region currently exists. Typical household products considered to be hazardous include household cleaner, batteries, drain openers, automotive fluids, paints, lawn and garden products and pesticides. In general it has been estimated that household hazardous wastes (HHW) account for approximately one to two percent of all wastes entering a landfill. Although small in volume, HHW pose a disproportionate threat to the environment, particularly groundwater.

Due to this threat and the historical absence of any type of HHW management within the region, it is evident that an organized system for HHW collection and disposal is desirable and needed.

OBJECTIVES AND STRATEGIES:

- * *It is the objective of the region to decrease the amount of HHW in the solid waste stream through public education, promotion and collection of HHW products.*
- * *A centralized location readily accessible with adequate space and facilities for temporarily collecting, sorting (if necessary) and packaging of HHW shall be utilized. It is recommended that the convenience/recycling center in Celina be used for scheduled H.H.W. pick-up days since it meets desired criteria.*
- * *The region will utilize the Public Information and Education Director to coordinate with appropriate groups and individuals to produce news releases, distribute public notices and flyers to publicize locations, times and type of materials received on HHW collection days.*

- * *The region will utilize fenced, adequate sites for stated collection days. County assistance as may be required will be requested and coordinated regarding appropriate safety, security and emergency response as might be necessary.*
- * *It is estimated, based on previous state sponsored HHW collection days and given the relatively small population of the region, that existing staff at the proposed convenience center, possibly assisted by volunteers or other county collection service personnel, will be sufficient to staff the sites during HHW collection days.*
- * *Due to the single county status of the region and its relatively small population, it is expected that by utilizing existing staff and existing convenience center locations no additional cost to the region should be budgeted for HHW collection.*

IMPLEMENTATION:

Implementation of household hazardous waste management for the region shall consist of establishing and promoting HHW collection days and providing increased public information and education.

- Fall 1994 - 2003 Coordinate with Public Information and Education Director, continue and expand promotion of H.H.W. Education
- Fall 1994 Establish Scheduled H.H.W. collection days
- Spring 1995 Solid Waste Planning Board Review of H.H.W. collection days' success

WASTE TIRES:

The county is in the process of establishing a permitted tire storage site which will meet applicable rules of the Division of Solid Waste Management of the State Department of Environment and Conservation. Estimated maximum capacity of storage site will be approximately 3,600 tires. Average quantity to be stored is projected to be 1000 tires.

The tires will be shredded at the proposed tire storage site.

The storage site and management of the site shall be provided by property lease and contract between Clay County and the operator of the private landfill in the county. At appropriate intervals, approximately four

(4) times per year or as may otherwise prove necessary, the state's mobile tire shredder shall be scheduled for shredding the stored tires at the site. The landfill personnel shall provide any needed labor and equipment to assist shredding operation.

It is expected that the tires will initially be disposed of by landfilling. If a suitable market can be developed that is economically feasible, the shredded tires will be diverted from landfill disposal to this new market.

Current operating costs for tire storage, management of vector control, shredding operation support and disposal is \$1.25 per tire for tires under 17" inside diameter and \$3.00 per tire for all larger tires. Based upon 3,000 tires per year, operating and disposal costs would be approximately \$4,000 per year.

According to the Tennessee Department of Revenue Office Audit Division, \$12,731 was collected in 1993 for Clay County tire pre-disposal fees representing 12,731 tires purchased in Clay County in 1993. It is expected that the proposed storing/shredding operation will be adequate for keeping up with the discard rate.

At present there is no plan for inventory and cleanup of illegal tire piles. It is expected that this could be handled by county personnel possibly with State Grant assistance. A copy of "County Responsibilities Household Hazardous Collection Events in Tennessee" is included in the Appendix.

WASTE OIL:

Waste oil is now being recovered for recycling by the Middle Tennessee Recyclers Marketing Cooperative.

Waste oil is now being accepted for recycling by the Middle Tennessee Recyclers Marketing Cooperative, however, waste oil was not being recovered in 1993.

The existing collection site for waste oil will be improved as part of the convenience center and recycling located in Celina.

A copy of "Used Oil Collection and Recycling Program Policy Guide" is included in the Appendix.

LEAD ACID BATTERIES:

Lead acid batteries are currently accepted by at least one private company in the county, Celina Recycling located in Celina pays \$0.50 per battery delivered to their business.

The county will continue to support battery recycling by

increased education and advertisement of available battery collection sites. It is also quite likely that a county convenience center may also accept batteries in the future, if proper handling, storage and transportation can be accomplished.

LITTER:

The current State Litter Grant provided funds for one man year round. He is sometimes assisted by prisoner labor for litter collection in the county. It is proposed that the existing litter collection program be educated in identifying recyclables and participating in separation of recyclable material for deposit at recycling collection sites.

There is also an "Adopt A Highway" program in place in Clay County and efforts should be made to assure its coordination and cooperation in recycling of suitable materials collected.

CHAPTER XI

IMPLEMENTATION: SCHEDULE, STAFFING AND FUNDING

CHAPTER XI

IMPLEMENTATION: SCHEDULE, STAFFING AND FUNDING

SYSTEM DEFINITION:

The Clay County Solid Waste Region has developed this plan to address and aid in the establishment of an integrated waste management system for the region.

The Region's general goals are to:

- * *Promote increased participation in recycling and to provide for facilities and education whereby that may be accomplished.*
- * *Meet and exceed, where possible, minimum levels of service for collection/disposal for the Region.*
- * *Promote source reduction and composting by providing suitable educational and informational services.*
- * *Provide planning to help assure future solid waste disposal capacity is available for the Region.*

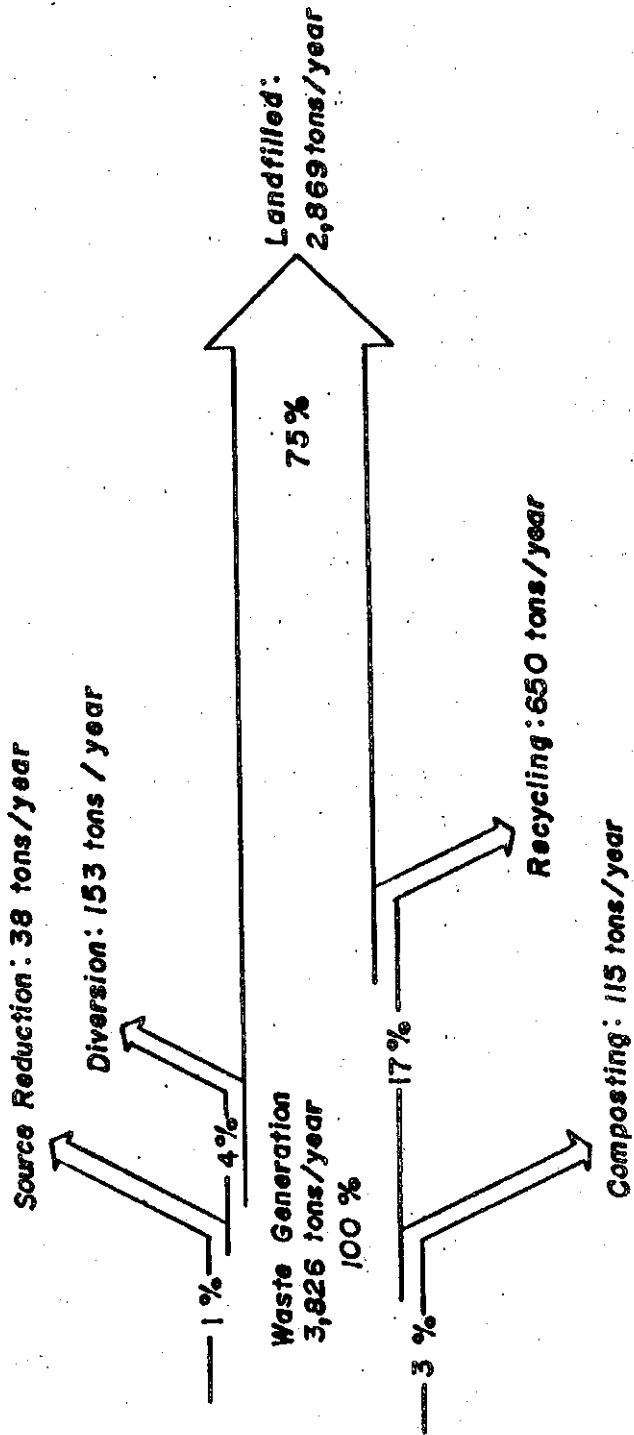
More specific objectives include:

- * *Establish the position of Regional Public Information and Education Director. This will be a part-time position possibly combined with another county position. As can be surmised from the position's title, this individual will establish, oversee, and promote educational programs and materials regarding all facets of Solid Waste Management issues in the Region, such as recycling, problem wastes, source reduction and composting, as well as assisting in other Solid Waste Areas as may be determined.*
- * *Establish the position of Regional Recycling Coordinator. This also will be a part-time position. This person will work and coordinate with the Public Information and Education Director to expand and promote existing recycling efforts in the Region, as well as assist in record keeping and reporting.*

- * *Establish a localized composting program in Celina and composting on an individual basis throughout the Region.* This will be under the direction of the Public Information and Education Director and will consist of Volunteer organizational and individual efforts.
- * *Establish State registered, manned convenience center.* By upgrading an existing location with use of State Grant Monies, and local "in-kind" match, the State required "minimum level of service" can be provided to the Region.
- * *Establish permanent, manned recycling drop-off center and recyclable processing center.* The purchase of recyclable material processing equipment such as a glass crusher, baler and scales can be accomplished with available grant funds and will make successful marketing of materials easier to accomplish.
- * *Establishment of tire storage site.* The County has initiated the process of the establishment of a tire storage site. This effort must be carried out to completion.
- * *Continue Household Hazardous Waste Collection Days.* The County has begun cooperation with the State H.H.W. collection program. This must be continued and promoted particularly through the efforts of the Public Information and Education Director.
- * *Analyze for Feasibility of Class IV Landfill.* Current data regarding the need for a Class IV Landfill is inadequate. The Region should initiate investigation of the feasibility of establishing a Class IV Construction and Demolition Waste Landfill in the Region. This could possibly involve public/private cooperation on construction and operation of the site.

The existing and proposed solid waste management system elements are shown on Map 7.

The proposed regional system waste generation, proportional flow and management is shown on the following Waste Flow Diagram.



WASTE FLOW DIAGRAM

1996

IMPLEMENTATION SCHEDULE:

<u>Activity</u>	<u>Date</u>
Apply for Convenience Center Grants	March 1994
Apply for Recycling Equipment Grants	March 1994
Apply for Tire Storage Grant	March 1994
Submit Solid Waste Plan	July 1994
Hire Recycling/Public Info. Director(s)	October 1994
Tire Storage Site Completed	December 1994
Convenience Center/Recycling Center Completed	January 1995
Recycling/Composting/Solid Waste Source Reduction/Education Program Initiated	December 1994 -- 2003
Class IV Demolition Waste Landfill Study/Design	July 1995
Class IV Demolition Waste Landfill Opened	June 1996 ----- 2003
Annual Progress Reports and Updates	As required

STAFFING AND TRAINING REQUIREMENTS:

Since the Region utilizes a private landfill, no staffing or training of landfill operators is addressed. Training for Convenience Center personnel shall be as per T.C.A. 68-211-853.

*** CURRENT SOLID WASTE STAFF:**

<u>Position</u>	<u>Number</u>
Truck Drivers-	2
Collection/Laborer	3
Attendant for Collection Site (future convenience center attendant)	1

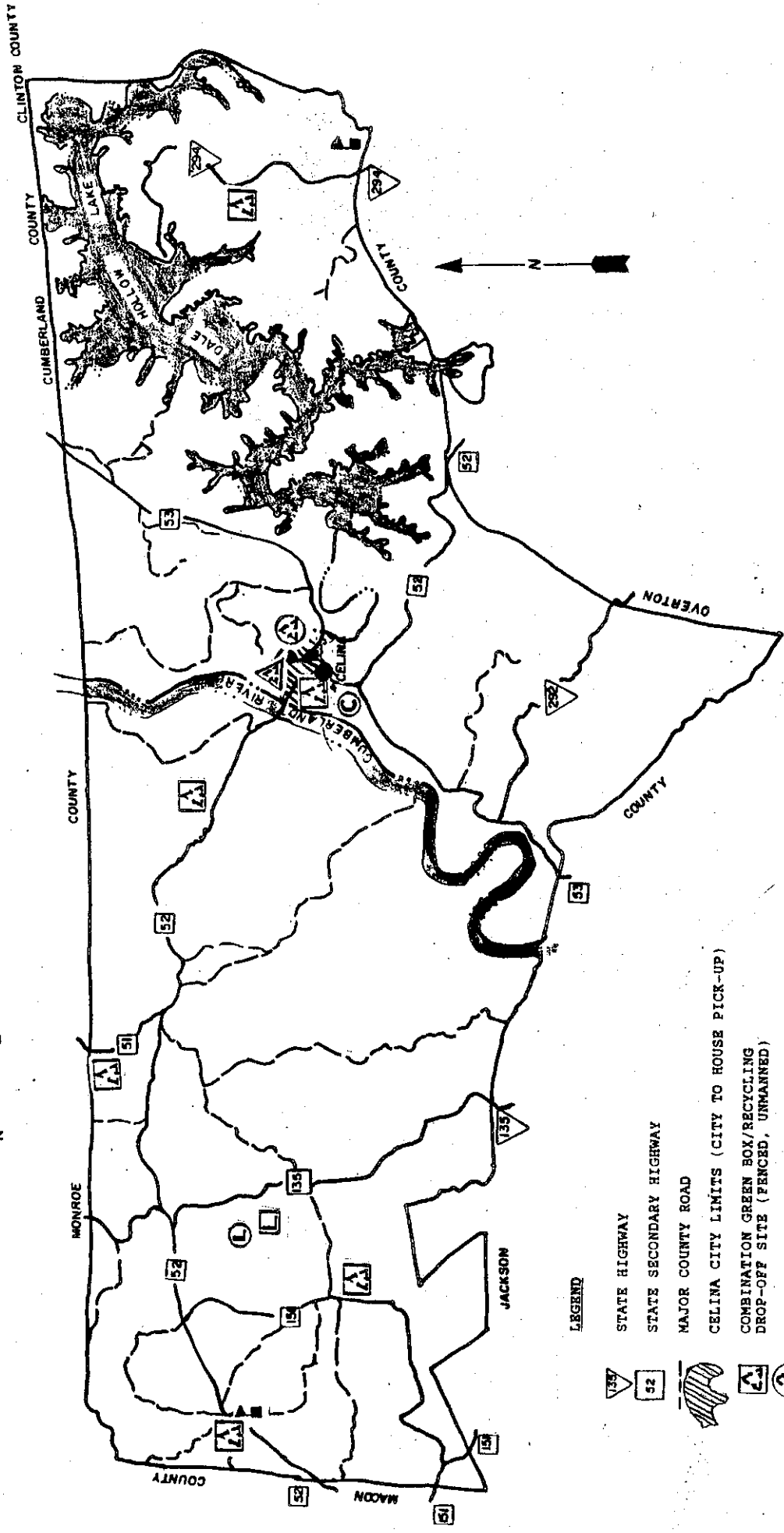
Additional Staff Required:

Recycling Coordinator	1
Public Information and Education Director	1

* Includes City of Celina Personnel














BUDGET:

Proposed ten year costs and revenues are shown in Tables XI-1 and XI-2.



MAP 7
EXISTING AND PROPOSED
SOLID WASTE
MANAGEMENT SYSTEM

LEGEND

-  STATE HIGHWAY
-  STATE SECONDARY HIGHWAY
-  MAJOR COUNTY ROAD
-  CELINA CITY LIMITS (CITY TO HOUSE PICK-UP)
-  COMBINATION GREEN BOX/RECYCLING
-  DROP-OFF SITE (FENCED, UNMANNED)
-  OIL RECYCLING, DROP-OFF SITE
-  RECYCLING DROP-OFF SITE
-  CLASS I PRIVATE LANDFILL (EXISTING)
-  EDUCATIONAL FACILITY
-  COMPOSTING SITE
-  CLASS IV LANDFILL
-  CONVENIENCE CENTER/RECYCLING DROP-OFF/PROCESSING SITE

NOTE: ALL AREAS OUTSIDE OF CELINA CITY LIMITS SERVED BY GREEN BOX DROP-OFF SITE.

Table XI-1
Costs of Solid Waste System
(1994-2003)

EXPENDITURE CATEGORY	1994	1995	1996	1997	1998	1999	2000	2001	2003	2003
Collection and Transportation	172,454	177,628	182,956	188,445	194,099	199,921	205,919	212,097	218,459	255,013
*Disposal (private landfill)	73,928	74,928	109,800	109,800	109,800	113,094	116,486	119,981	123,581	127,288
Education	1,000	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
Recycling	0	3,000	3,045	3,090	3,137	3,184	3,232	3,280	3,329	3,379
Problem Wastes	0	1,100	1,100	1,133	1,167	1,202	1,238	1,275	1,343	1,353
Convenience Center/Recycling Center Improvements	80,000	0	0	0	0	0	0	0	0	0
Tire Storage Site Construction	10,000	0	0	0	0	0	0	0	0	0
TOTAL COSTS	337,382	264,156	304,401	309,968	315,703	324,901	334,425	344,133	354,182	364,533

* Existing Contract Rate Expires in 1996

Table XI-2
Revenues of Solid Waste System
(1994-2003)

REVENUE CATEGORY	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GENERAL SERVICE CHARGES:										
Tipping Fees	100,000	103,000	115,360	118,821	122,385	126,056	129,837	133,732	137,744	141,876
OTHER LOCAL REVENUE:										
Tax Base (general fund)	127,171	133,041	160,514	162,199	163,940	169,030	174,328	179,685	185,258	191,003
STATE OF TENNESSEE:										
Convenience Center Grant	50,000	0	0	0	0	0	0	0	0	0
Recycling Equipment Grant	20,000	0	0	0	0	0	0	0	0	0
Tire Storage Site Grant	10,000	0	0	0	0	0	0	0	0	0
Public Information & Education Grant		7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
TDOT Litter Grant	20,211	20,615	21,027	21,448	21,877	22,314	22,760	23,216	23,680	24,154
OTHER:										
TVA Recycling Grant	10,000	0	0	0	0	0	0	0	0	0
TOTAL REVENUES	337,382	264,156	304,401	309,968	315,703	324,901	334,425	344,133	354,182	364,533

CHAPTER XII

ALLOCATION OF IMPLEMENTATION RESPONSIBILITIES: PLAN ADOPTION AND SUBMISSION

CHAPTER XII

ALLOCATION OF IMPLEMENTATION RESPONSIBILITIES:

PLAN ADOPTION AND SUBMISSION

PLAN ADOPTION AND IMPLEMENTATION:

This plan has been developed and adopted by the Clay County Solid Waste Planning Board. The responsibility for implementing the plan rests solely with the Clay County Commission with the municipality of Celina continuing its present solid waste management duties. The plan has been amended to reflect appropriate comments received during the public hearings for this plan. The Clay County Commission has adopted this plan as shown in Appendix E.

SUBMISSION:

The Clay County Solid Waste Region is required to submit three copies of the Plan to the Governor's State Planning Office prior to July 1, 1994.

CHAPTER XIII

FLOW CONTROL AND PERMIT APPLICATION REVIEW

CHAPTER XIII

FLOW CONTROL AND PERMIT APPLICATION REVIEW

FLOW CONTROL:

No flow control measures are currently proposed by the plan due to the existing agreement Clay County has with the existing sanitary landfill within the county that is presently being utilized. The existing agreement limits the amount of waste which can be accepted at the facility to an amount which should assure available capacity for the region for the planning period. See the agreement in PART III APPENDICES.

PERMIT APPLICATION REVIEW:

In order to determine whether a new solid waste disposal facility or incinerator proposed for location within the region is consistent with the regional plan, the following procedure for review is established.

The applicant must submit a copy of the permit application to the Clay County Solid Waste Board at or before the time the application is submitted to the State Commissioner. The Clay County Solid Waste Board will review the application for compliance with the provisions of the Solid Waste Management Act of 1991, and will conduct a public hearing after public notice has been given in accordance with Tennessee Code Annotated, title 8, chapter 44. The hearing will give all interested persons an opportunity to submit written and oral comments, and the proceeding will be recorded and transcribed. The Clay County Solid Waste Board will render a decision on the application within ninety (90) days after receipt of a complete application. The Clay County Solid Waste Board will immediately notify the Commissioner of its approval or rejection of an application.

The Clay County Solid Waste Board may reject an application for a new solid waste disposal facility or incinerator/waste-to-energy facility or expansion of an existing solid waste disposal facility or incinerator/waste-to-energy facility within the Clay County Solid Waste Board Region only upon determining that the application is inconsistent with the approved solid waste management plan. The reasons for rejection must be documented in writing including the specific grounds on which the application is inconsistent with the plan.

PART III
APPENDICES

APPENDIX A

APPENDIX A

Legal Documentation and Organization of the Region

To assure that the municipal solid waste region was established and is operating in accordance with T.C.A. Section 69-31-813 the following documents are included.

Certified copy of the resolution adopted by the county commission establishing the region [T.C.A. Section 68-31-813(a)].

Description of the administrative board for the region:

- a. The Board has four members appointed by the County Executive and approved by the Board of County Commissioners. The city of Celina has a Board member appointed by the Mayor of Celina and approved by the city council of Celina. Members include:

Wayne Smith, Cornell Smith, Dale Reagan, Glen Watson and Larry Head

The Board shall serve a six (6) year term except that Dale Reagan and Glen Watson appointed by the County Executive shall have a two (2) year term, that Wayne Smith appointed by the County Executive shall have a four (4) year term, that Cornell Smith, appointed by the County Executive shall have a six (6) year term, that the person appointed by the mayor of Celina shall have a four (4) year term.

The Board has three elected officers:

Chairman, Wayne Smith, who presides at all meetings, Vice-Chairman, Cornell Smith, who serves as presiding officer in the absence of the Chairman, Secretary, Dale Reagan, who calls the roll of meetings and takes minutes or oversees the taking of the minutes.

ADVISORY COMMITTEE ROLE:

The Advisory Committee was designated and charged with the responsibility of providing input to the plan review.

No term was set for the Advisory Board.

The members are:

Coell Hickman, Clay County Executive

Donnie Long

Current members of Clay County Solid Waste Committee

RESOLUTION NO. 3

A RESOLUTION
CREATING CLAY COUNTY'S MUNICIPAL
SOLID WASTE PLANNING REGION

WHEREAS, the adoption of the Subtitle D landfill regulations by the United States Environmental Protection Agency and companion regulations adopted by the Tennessee Solid Waste Control Board will impact on both the cost and method of disposal of municipal solid waste; and

WHEREAS, at the urging and support of a coalition of local government, environmental, commercial, and industrial leaders, the 97th Tennessee General Assembly enacted T.C.A. 68-211-801 et seq. titles "Solid Waste Management Act of 1991"; and

WHEREAS, with the view that better planning for solid waste will help control the additional costs that will be imposed by the new landfill regulations, help protect the environment, provide an improved solid waste management system, better utilize our natural resources, and promote the education of the citizens of Tennessee in the areas of solid waste management including the need for and desirability of reduction and minimization of solid waste, local governments in Tennessee supported and work for the passage of this Act; and

WHEREAS, one of the stated public policies of this Act is to institute and maintain a comprehensive, integrated, statewide program for solid waste management; and

WHEREAS, as per T.C.A. 68-211-811, the nine development districts in the State of Tennessee have completed a district needs assessment which are inventories of the solid waste systems in Tennessee; and

WHEREAS, Clay County's Board of County Commissioners has given consideration to the needs assessment prepared by the Upper Cumberland development district; and

WHEREAS, T.C.A. 68-211-813, requires that counties in the State of Tennessee from municipal solid waste regions no later than December 12, 1992; and

WHEREAS, the Act's stated preference is the formation of multi-county regions with counties having the option of forming single or multi-county municipal solid waste regions; and

WHEREAS, the State of Tennessee will provide grant monies of varying amounts to single county, two county, and three or more county municipal solid waste regions to assist these regions in developing their municipal solid waste region plans; and

WHEREAS, the primary and prevailing purpose of the municipal

solid regions are the preparation of municipal solid waste regional plans which among other requirements must identify how each region will reduce its solid waste disposal per capita by twenty-five percent (25%) by December 31, 1995, and a planned capacity assurance of its disposal for a ten (10) year period; and

WHEREAS, the development of a municipal solid waste regional plan that results in the most cost effective and efficient management of municipal solid waste is in the best interest of the citizens of Clay County.

NOW, THEREFORE BE IT RESOLVED, by the Board of County Commissioners of Clay County, Tennessee, acting pursuant to T.C.A. 68-211-801 et seq., that there is hereby established a Municipal Solid Waste Region for and by Clay County, Tennessee; and

BE IT FURTHER RESOLVED, that pursuant to T.C.A. 68-211-813(a)(2), that the Board of County Commissioners of Clay County, Tennessee finds and determines that Clay County shall be and shall constitute a single county municipal solid waste region due to the following:

Clay County recognizes the advantages of multi-county solid waste planning. We are reviewing the information contained in the District Needs Assessment which was released September 30, 1992. However, when considering the information available at this time, we feel that it is in the best interest of the citizens of Clay County to become a single county municipal solid waste region. Clay County will continue to plan and cooperate with its neighbors in any way necessary to provide the most efficient and cost effective solid waste management system for its citizens; and

BE IT FURTHER RESOLVED, that pursuant to T.C.A. 68-211-813(b)(1), a Municipal Solid Waste Region Board is hereby established to administer the activities of this Region; and

BE IT FURTHER RESOLVED, that this Municipal Solid Waste Region Board shall be composed of (odd number between 5 and 15) members; and

BE IT FURTHER RESOLVED, that pursuant to T.C.A. 68-211-813(b)(1) four Board members shall be appointed by the County Executive and approved by this Board of County Commissioners and, due to the fact that Celina collects or provides disposal services through its own initiative or by contract, the City of Celina shall have a Board member appointed by the Mayor of Celina and approved by the City Council (Board of Alderman) of Celina; and

BE IT FURTHER RESOLVED, that members of the Board of the Municipal Solid Waste Region shall serve a six (6) year term except that Dale Reagan and Glen Watson appointed by the County Executive shall have a two (2) year term, that Wayne Smith appointed by the County Executive shall have a four (4) year term that Cornell Smith appointed by the County Executive shall have a six (6) year term, that person appointed by the Mayor of Celina shall have a four (4)

year term; and

BE IT FURTHER RESOLVED, that this Municipal Solid Waste Region Board shall have all powers and duties as granted it by T.C.A. 68-211-813 et seq. and in addition, in the performance of its duty to produce a municipal solid waste region plan, it shall be empowered to utilize existing Clay County governmental personnel, to employ or contract with persons, private consulting firms, and/or governmental, quasi-governmental, and public entities and agencies and to utilize Clay County's services, facilities and records in completing this task; and

BE IT FURTHER RESOLVED, that at the Municipal Solid Waste Region Board's initial organizational meeting it shall select from its members a chair, vice-chair, and secretary and shall cause the establishment of a municipal solid waste advisory committee whose membership shall be chosen by the Board and whose duties are to assist and advise the Board; and

BE IT FURTHER RESOLVED, that the Municipal Solid Waste Region Board, in the furtherance of its duty to produce a municipal solid waste region plan, is authorized to apply for and receive funds from the State of Tennessee, the federal government, Clay County, Celina, and to apply for and receive donations and grants from private corporations and foundations; and

BE IT FURTHER RESOLVED, that Clay County shall receive, disburse, and act as the fiscal agent for the administration of the funds of the Municipal Solid Waste Region and the Region's Board; and

BE IT FURTHER RESOLVED, that upon the passage of this Resolution and at no later date than December 31, 1992, the County Clerk of Clay County shall transmit a copy of this Resolution to the Tennessee State Planning Office.

RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF CLAY COUNTY, TENNESSEE, this 2nd day of November, 1992, the welfare of the citizens of Clay County requiring it.

A majority having voted in favor of this passage of the resolution, the same was declared duly and legally adopted.

MOTION MADE BY: Richard A. Hays

SECONDED BY: Ralph Rich

THOSE VOTING AYE: LOUIS MCLERRAN, RALPH RICH, C. D. REECER, ROBERT M. TEEPLES, RICHARD HAYES, JOHNNIE MCLERRAN, HARVEY WEBB.

THOSE VOTING NAY: LILLIAN WHITE, TIM TURNER

THOSE NOT VOTING: _____

THOSE ABSENT: JACKIE LANGFORD

SPONSOR

COUNTY COMMISSIONER

ATTEST:

Patricia Hix
COUNTY COURT CLERK

APPROVED:

Coll Hix
COUNTY EXECUTIVE

APPROVED AS TO FORM:

COUNTY ATTORNEY

State of Tennessee
Clay County
I, PATRICIA HIX, county clerk, Clay County,
Tennessee certify the foregoing to be
true and perfect copy as appears of
record in my office, as found in book

#11 page 226-229

This 22 day of June 1993

Patricia Hix
COUNTY CLERK

BY-LAWS OF THE
CLAY COUNTY PLANNING REGION

ARTICLE I

NAME

This organization, an instrumentality of Clay County in the State of Tennessee, shall be known as the Clay County Solid Waste Planning Region, hereinafter referred to as the "Region".

ARTICLE II

PURPOSES

The Region was created in accordance with the requirements of the Solid Waste Management Act of 1991 for the purpose of preparing a solid waste regional plan for Clay County requirements must identify how the region will reduce its solid waste disposal per capita by twenty-five percent (25%) by December 31, 1995, and a planned capacity assurance of its disposal for a ten (10) year period.

ARTICLE III

The Board of Directors of the Region shall be elected and serve in accordance with the enabling resolution passed by the County Commission. Further, an advisory committee shall be established as provided by said resolution.

A majority of the members of said Region's Board shall constitute a quorum for the transaction of business.

The Board shall meet as required to discharge its responsibilities. The public shall be allowed and encouraged to attend.

ARTICLE IV

OFFICERS AND DUTIES

The Board shall elect from among its membership the following officers who shall have the duties described below and such other duties as may be prescribed by the Board:

Chairman -- The Chairman shall preside at all meetings of the Board.

Vice-Chairman -- The Vice-Chairman shall serve as the presiding officer of the Board in the absence of the Chairman.

Secretary -- The Secretary shall call the roll of meetings of the Board and take minutes thereof or oversee the taking of the minutes.

Each officer shall be elected to serve as per the terms outlined in the enabling resolution.

ARTICLE V.

FINANCIAL REPORT

The Board shall provide for an annual financial report of the Board's finances. Copies of the financial report will be available to each member upon request.

ARTICLE VI

HEADQUARTERS

The Headquarters of the Region shall be in Celina, Tennessee or as otherwise established by the Board.

ARTICLE VII

ROBERT'S RULES OF ORDER

The Board of Directors shall follow Robert's Rules of Order in conducting all meetings of the Board.

ARTICLE VIII

AMENDMENTS

The By-Laws may be amended or repealed by the Board at any meeting as may be duly called by the Board for such purpose. Provided, however, before any such amendment or repeal may be considered, notice in writing of any proposed changes must be given at least two weeks prior to the meeting at which they are to be voted upon. Such notices shall be given to the Chairman who shall immediately transmit copies thereof to the officers and members of the Board, and the same shall be considered by the Board at the next meeting.

A two-thirds (2/3) majority of all active Board members attending and entitled to vote at the meeting will be required to effect any proposed change in these By-Laws.

DATED: April 2, 1993

ATTEST:

Correll Smith

APPROVED:

Wayne Smith
CHAIRMAN

FRIDAY - APRIL 2, 1993 6:30 P.M.

Members present: Wayne Smith, Larry Head, Cornell Smith, Dale Reagan, Glen Watson. Also present: Ken Shepherd, Harvey Webb and Coell Hickman.

The following officers were elected:

CHAIRMAN: Wayne Smith
(Motion by Dale Reagan, seconded by Larry Head - it passed unanimously)

VICE-CHAIRMAN: Cornell Smith
(Motion by Dale Reagan, seconded by Wayne Smith - it passed unanimously)

SECRETARY: Dale Reagan
(Motion by Larry Head, seconded by Glen Watson - it passed unanimously)

A motion was passed to hire Oral Smith and Associates as consulting engineer for Clay County's 10 year plan for \$15,000. Motion by Dale Reagan, seconded by Cornell Smith, it was passed unanimously.

A motion was passed to draft a letter to John Smith, of Oral Smith and Associates, awarding contract and discussing payment by chapters;

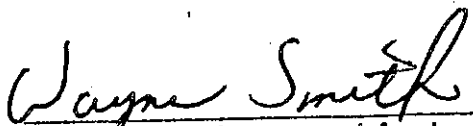
2 pay periods:


Chapters 1 - 7	\$7,500.00
Chapters 8 - Completion	\$7,500.00

Motion was made by Larry Head, and seconded by Cornell Smith, it was passed unanimously.

A motion was passed to accept attached By-Laws. Motion by Larry Head, seconded by Cornell Smith, it was passed unanimously.

Meeting was adjourned. Motion was made by Larry Head and seconded by Dale Reagan, it was passed unanimously.


Wayne Smith, President


Dale Reagan, Secretary

November 10, 1992

The Board of Mayor and Aldermen of the City of Celina met in regular session at the regular meeting place, City Hall, in Celina, TN at 6:00 P.M.

Present: Mayor Buddy Thompson, City Recorder Jo Helen Eads, City Atty. James D. White, Jr.
Aldermen Present: Linda Kendall and Boyd Scott.

Aldermen Absent: Donnie Long.
Visitors Present: Eugene Collins.

Mayor Thompson called the meeting to order. The minutes of the last meeting were read. Boyd Scott made motion to approve the minutes as read. Linda Kendall seconded it. All for it. The minutes were approved as read.

Boyd Scott made motion to approve the appointment of Larry Head by Mayor Thompson to serve on the Clay County Solid Waste Board representing the City of Celina. Linda Kendall seconded it. All for it. Motion carried.

Boyd Scott made motion to approve on second reading the 1991-1992 amended budget, retro-active August 11, 1992. Linda Kendall seconded it. All for it. Motion carried.

Boyd Scott made motion to adjourn. Linda Kendall seconded it. All for it. Meeting adjourned.

Boyd Scott

Alderman

Buddy Thompson

Mayor

Linda Kendall

Alderman

Jo Helen Eads

Recorder

Alderman

SOLID WASTE PLANNING BOARD MEETING

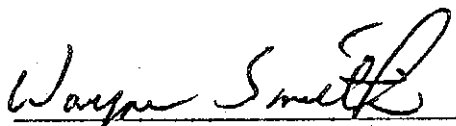
THURSDAY, FEBRUARY 17, 1994

Members present: Wayne Smith, Cornell Smith, John Smith. Also present: Ken Shepherd, John Smith of Oral Smith & Assoc., and Coell Hickman.

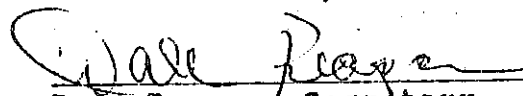
A motion was passed to amend the contract between the Clay County Solid Waste Region Board and Oral Smith & Associates by adding April 4, 1994 as the completion date for the region plan draft. Motion by Cornell Smith, seconded by Wayne Smith, it was passed unanimously.

A motion was passed to accept the following members to the Advisory Committee; Coell Hickman, Donnie Long and members of the Clay County Solid Waste Committee members. Motion by Cornell Smith, seconded by Wayne Smith, it was passed unanimously.

Meeting was adjourned. Motion was made by Cornell Smith and seconded by Wayne Smith, it was passed unanimously.



Wayne Smith, President



Dale Reagan, Secretary

June 22, 1993

Oral Smith & Associates, Inc.
Consulting Engineers
P.O. Box 140070
203 Donelson Pike
Nashville, TN 37214

Re: Region Financial Accounting Requirements for
Counties and Municipalities

Dear Mr. Smith:

Clay County and the City of Celina are not required to set up special revenue funds or enterprise funds for the landfill, located in Clay County because Upper Cumberland Solid Waste Management, Inc. is a private company. Clay County and the City of Celina contract directly with the landfill.

Sincerely,



Coell Hickman,
Clay County Executive

CEH:djr

Vice Mayor
Donnie Long



Linda Kendall
Roy Burnette

P. O. Box 449, Celina, Tennessee 38551

Phone 243-2115

Joe Dan Fox, Mayor

March 22, 1994

Oral Smith & Associates, Inc.
Consulting Engineers
P O. Box 140070
203 Donelson Pike
Nashville, Tennessee 37214

Attention: John W. Smith

Gentlemen:

This is to certify that the City of Celina is in compliance with the uniform solid waste financial accounting system under the Solid Waste Management Act of 1991.

The Special Revenue Fund is used to account for the activity related to the collection and disposal of solid waste. The City does not operate a landfill, but merely collects trash from citizens and delivers it to a private landfill.

Sincerely,



Joe Dan Fox

APPENDIX C

APPENDIX C

Public Participation Activities

Public participation activities during development of the regional plan include:

1 can (14 1/2 oz.) green asparagus
 2 cups diced cooked chicken
 2 cans mushroom soup
 1 cup mayonnaise
 1 teaspoon lemon juice
 1/2 teaspoon curry powder
 1/2 cup soft bread crumbs
 1 tablespoon margarine, melted

Heat oven to 350 degrees. Grease 2-qt. oblong baking dish. Drain asparagus and arrange in prepared dish. Place chicken on asparagus.

In a mixing bowl, combine soup, mayonnaise, lemon juice and curry powder. Pour mixture over chicken and sprinkle cheese on evenly. Combine bread crumbs with margarine and sprinkle over cheese. Bake for 25 to 30 minutes.

Serves 6 to 8



EDWINA NAPIER RECIPES AND REASONINGS

Happy Birthday to Vanis Long, April 19; Martha Thurman, April 21; James Gray, April 21.

The Cumberland County Playhouse in Crossville will be presenting the play "The Secret Garden" on weekends April 29 through June 4. This musical, based on the novel by Frances H. Burnett is for all ages.

Bible Verse

The Fruit of the righteous is a tree of life; and he that winneth souls is wise.
 Proverbs 11:30

The Livingston State Area Vocational-Technical School will be accepting applications for the Medical Assistant Program from April 4 to April 29 between 7 a.m. and 4 p.m., Monday through Friday. The program will begin in July.

The Medical Assistant is a multi-skilled person who assists physicians in the office, clinic or health care facility. This person performs administrative and clinical duties as a vital member

of the health care team. The medical assistant program is a 12-month program which include an internship clinical setting.

Graduates will be eligible to take Certified Medical Assistant Examination offered by the American Association of Medical Assistants after being employed by a physician for one year.

The requirements for entrance into the program in

Bill Fiske's Bugle

Come, let us reason together

Volume 27 March 3, 1937 Number

Honors for the best spellers in the recently conducted Spelling Bee at Celina High School were awarded to the following pupils:

- 1st place - Helen Turner, Pine Hill;
- 2nd place - Callie Maxfield, Fairview;
- 3rd place - Mayme Smith, Butler's Landing.

After the grand jury had returned 44 true bills, and reports of the bonds of the county officials and condition of the county poorhouse and the jail, criminal court closed last Friday.

Farmers of the county, under the leadership of County Farm Agent Charles Vaughn, are making a systematic study of stock feeding, finding out the food elements of the different feeds used and also learning the proteins and vitamins most needed by the different animals to conserve feed and also raise better animals.

Carthage High School de-

feated Willow Grove High in the finals of the Tent trict basketball tournament at Livingston last week and crowned champions.

The county's high placed three men of the the All-Tournament team selection was as follows: I OHS; Masters, CHS; Briton, Willow Grove; Norpine; and Cornwell of Ca-

Mr. Will Hall Sullivan, General Manager of Tri-Electric Membership C of Lafayette, has a an invitation by the Chamber of Commerce address here next Saturday night at 7:30.

Mrs. E. W. Fox of Tennessee, is visiting her H. S. Williamson.

Finest Quality Linoleum
 \$2.49 to \$5.79
 6x9 ft. and 9x12 ft.
 T. F. Kirkpatrick and
 Celina, Tennessee

Brock Strong born Feb. 19

Brock Dillian Strong was born to Ricky and Sue Strong of Gainesboro, Tennessee on February 19, 1934 at Cookeville General Hospital.

Brock is the grandson of James and Martha Strong of Celina and Alice Beechboard and the late Elzo Beechboard of Gainesboro.

He is the great-grandson of Herbert Strong and the late Maxie Strong, Celia and the late Grover Rich, the late Carrie and Allen Beechboard and Nannie B. and the late Malcom Spivey.

Happily welcoming the new arrival home was his sister Atha Amanda Strong.



BROCK DILLIAN STRONG

PUBLIC HEARING

The Clay County Solid Waste Region Planning Board is in the process of preparing a Municipal Solid Waste Regional Plan as required by the Solid Waste Act of 1991. The plan will address how the Region will meet its solid waste management needs such as solid waste reduction, recycling, waste collection and disposal capacity over the next ten years. A copy of the proposed Clay County Municipal Solid Waste Region Plan and Information concerning plan preparation guidelines are available for inspection at the Clay County Ex-

MARRIAGES

PUBLIC HEARING

Nancy Webb

Ernest McFerran

Wayne Smith

Alex Watson

Ralph Rich

Linda Fraley

Stacie Fraley

Alfonso C. Birdwell

Kecaine Birdwell

Clint Fraley

Holanie Fraley

Walt Kazan

Joseph W. Johnson

Bill Dickson

Nancy Howard

Linda Smith

Cornell Smith

Paul T. Smith

John W. Smith

PUBLIC HEARING

Clay County Solid Waste Regional Plan

A public hearing was held April 25, 1994 at 6:30 P.M. at the Clay County Courthouse.

The purpose of the meeting was stated as being to receive oral and/or written comments regarding the proposed plan.

A brief introductory comment regarding the statutory requirements for the preparation of the plan was made by the consultant.

Statements from participants consisted of questions to the Board and their consultant regarding:

- * Past expenditures for disposal at the private landfill.
- * Legal status of existing contract between County and private landfill, in particular what assurance does the county have that the existing private landfill operator will not violate the existing contract and fill the landfill up before the ten years is up.
- * The County's ability and willingness to condemn land for future landfill space.
- * The rationale for the proposed future Class IV landfill location.

No written comments were submitted.

CLAY COUNTY
SOLID WASTE PLANNING BOARD MEETING


MONDAY, APRIL 25, 1994

Following the Public Hearing, the Board meeting was called to order by Wayne Smith, President. Members present: Wayne Smith, Cornell Smith, Glen Watson, Dale Reagan and Larry Head. Also present were those attending the Public Hearing concerning the Solid Waste Regional Plan.

Larry Head made the motion to approve this plan and to present it to the Clay County Commission for approval on May 2, 1994 and seconded by Dale Reagan. Motion passed unanimously.

Motion was made by Larry Head and seconded by Dale Reagan to adjourn. It was passed unanimously.


Wayne Smith, President


Dale Reagan, Secretary

APPENDIX D

APPENDIX D

Exports and Imports

Prior to the formation of the Clay County Solid Waste Region, the private landfill currently operating in the Region had entered into an agreement with Jackson County, Tennessee for the acceptance of the county's solid waste. The landfill also is accepting waste from other private companies both in state and from Monroe County, Kentucky.

The Board is aware of these imports and does not seek or anticipate any ban of imports other than as currently exists in the agreement between Clay County and the landfill.

APPENDIX E

APPENDIX E

County Commission Review and Approval

the attached to year 2012
Solid Waste Region Board to the County Commission of Clay County,
Tennessee be approved by the Clay County Commission and sent to the
State of Tennessee Department of Environment and Conservation,
Division of Solid Waste Assistance for final approval.

MOTION MADE BY:

SECONDED BY:

THOSE VOTING AYE: JOHNNIE MCLERRAN, HARVEY WEBB, LOUIS MCLERRAN,
RALPH RICH, ROBERT M. TEEPLES, RICHARD HAYES, JACKIE LANGFORD.

THOSE VOTING NAY: LILLIAN WHITE, TIM TURNER, C.D. REECER

THOSE NOT VOTING: NONE

THOSE ABSENT: NONE

Coell G. Dixon
COUNTY EXECUTIVE

ATTEST:

Patricia Hix
COUNTY COURT CLERK

State of Tennessee
Clay County

I, **PATRICIA HIX**, county clerk, Clay County,
Tennessee certify the foregoing to be
true and perfect copy as appears of
record in my office, as found in book
12 - 2

APPENDIX F

APPENDIX F

Private Landfill/Clay County Disposal Agreement

EXHIBIT III
C O N T R A C T

This Contract, made and entered into on the 8th day of November, 1990, by and between Cornell Smith (hereinafter "Mr. Smith") and Clay County, Tennessee (hereinafter "Clay County") WITNESSETH:

1. Mr. Smith has taken steps to install a landfill in Clay County on that property described on attached Exhibit "A" (hereinafter "the landfill") and approval of the landfill is currently before the Clay County Commission, pursuant to House Bill 741.

2. On July 11, 1988, the Clay County Commission adopted Resolution No. 2, which deals generally with the relationship between Clay County and Mr. Smith concerning the landfill.

3. Before the Clay County Commission votes, the parties desire to clarify the terms of the said Resolution No. 2.

4. This Contract is contingent on Mr. Smith's receiving a permit from the State of Tennessee for the landfill. This Contract applies for three years from commencement of operation, except where otherwise specified.

5. During the first year of operation, Mr. Smith will accept household trash from those residential dumpsters owned by Clay County for a total of nineteen thousand dollars (\$19,000.00). The second year, he will accept the same trash for twenty thousand dollars (\$20,000.00), and during the third year, he will accept the same trash for twenty-one thousand dollars (\$21,000.00). The maximum amount of trash being accepted under this paragraph is twelve thousand (12,000) cubic yards at landfill gate per year. Anything over that amount will be charged at five dollars (\$5.00) per cubic yard at landfill gate. However, this paragraph does not include car tires, wire, or refrigerators, which will be charged for separately, at the same rates charged to other parties.

6. The agreement in paragraph 5 applies only to the trash specified therein, and any other individual, factory, city, business, or entity which wishes to use the landfill will have

to make its own arrangements. Any other trash which is hauled in Clay County trucks, will likewise be charged separately, unless it specifically comes from the areas set out in paragraph 5.

7. To preserve the expected life of the landfill, and to allow for sufficient trash to make the operation efficient, the parties desire to agree on the quantity of trash to be placed in the landfill. This Paragraph 7 is not limited to three (3) years, but shall apply for the entire time the landfill is operated. Under no circumstances shall the total amount of trash which has been placed in the landfill exceed an average of sixty thousand (60,000) cubic yards at the gate per year of operation, including that described in paragraph 5. Mr. Smith agrees further to accept for each year of operation all the trash generated in Clay County, up to twenty thousand (20,000) yards at landfill gate per year. The price shall be as set out in Paragraph 5 for the first three (3) years. Thereafter, the price shall be negotiated at rates competitive with landfills permitted under the same regulations as Mr. Smith's landfill.

8. This Paragraph 8 is not limited to three (3) years, but shall apply for the entire time the landfill is operated. The trash to be placed in the landfill will be limited to trash generated within a one hundred (100) mile radius of the landfill unless permission is received from the Clay County Commission by a duly passed resolution. If Mr. Smith violates this Contract by accepting trash from more than a one hundred (100) mile radius, he shall be liable to Clay County for all funds received for such trash, as liquidated damages. It is understood that trash is generated by being disposed of under normal usage. Thus, trash disposed of by being placed in a dumpster, even if from more than one-hundred (100) miles away would not violate the rule, if it was normal disposition. However, trash would not be considered to be generated in an area if trash from another area is brought to a point where it is reprocessed or accumulated for the purpose of accepting trash from another area. It is the intent hereof that casual disposition of trash shall not be considered a violation of this provision, but that accumulation of trash at a

point shall be in violation, if the bulk of the trash is transferred from outside the one-hundred (100) mile radius.

9. If Mr. Smith does not receive at least forty thousand (40,000) cubic yards per year of trash at gate, he shall have the right to close the landfill or to renegotiate with Clay County. Further, if he cannot receive a reasonable assurance that he will be able to obtain forty thousand (40,000) cubic yards per year of trash at the gate, he shall not be obligated to open the landfill. If Mr. Smith does not open the landfill or closes it under these circumstances, or if the landfill is closed by order of the State of Tennessee, he shall be entitled to terminate this contract. If he refuses to accept Clay County's trash, as provided in paragraph 7 while continuing to operate said landfill or otherwise breaches this contract, then he shall be liable for all damages for breach of contract as provided by Tennessee law. During said three (3) year period, Mr. Smith shall not close the landfill unless one of the conditions set out in this paragraph exists. Thereafter, he shall have the right to close the landfill, provided that he meets all state requirements.

10. This Paragraph 10 is not limited to three (3) years, but shall apply for the entire time the landfill is operated. The landfill shall be operated according to all state specifications and requirements. In the event that the landfill is offered for sale, Clay County shall have a sixty (60) day right of first refusal to purchase the landfill at the same price and terms as it is offered to a third party.

11. This Paragraph 11 is not limited to three (3) years, but shall apply for the entire time the landfill is operated. Mr. Smith shall provide a monthly report to the Clay County Commission showing the amount of trash accepted at the landfill gate, the source of such trash.

12. This Paragraph 12 is not limited to three (3) years, but shall apply for the entire time the landfill is operated. This Contract shall be binding on all parties, their successors, heirs and assigns, except that if Mr. Smith dies or becomes unable to operate the landfill during the first three (3) years,

said heirs, successors and assigns shall not be required to continue operations, but shall have the option of continuing, provided that all state requirements are met.

13. This Paragraph 13 is not limited to three (3) years, but shall apply for the entire time the landfill is operated. No provision in this Contract concerning damages or any other matter shall impair any remedy available at law or equity. It is explicitly understood that nothing herein waives any right of Clay County to injunctive relief for any violations hereof.

14. This Paragraph 14 is not limited to three (3) years, but shall apply for the entire time the landfill is operated. If Clay County brings any hazardous waste or any other waste not allowed by State regulations in the landfill, it shall be responsible for such trash, and shall indemnify and hold Mr. Smith harmless for all such trash placed in the landfill.

IN WITNESS WHEREOF, the parties have hereunto set their hands on the date first above written.

Cornell Smith
CORNELL SMITH

CLAY COUNTY, TENNESSEE

Coell Hickman
By: Coell Hickman
County Executive

STATE OF TENNESSEE
COUNTY OF CLAY

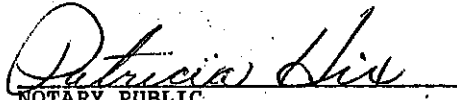
Personally appeared before me, Patricia Hix, notary public, Cornell Smith, with whom I am personally acquainted, or proved to be on the basis of satisfactory evidence, and who acknowledged that he executed the within instrument for the purposes therein contained. Witness my hand and seal, at office, this 8th day of November, 1990.

Patricia Hix
NOTARY PUBLIC
My Comm. Exp.: 9/1/94

STATE OF TENNESSEE
COUNTY OF CLAY

Personally appeared before me, Patricia Hix, notary public, Coell Hickman, with whom I am personally acquainted, or proved to be on the basis of satisfactory evidence, and who acknowledged that he executed the within instrument for the purposes therein contained, and who further acknowledged that he is the County Executive of the maker or a

constituent of the maker and is authorized by the maker or by its
constituent, the constituent being authorized by the maker, to
execute this instrument on behalf of the maker. Witness my hand
and seal, at office, this 8th day of November, 1990.


NOTARY PUBLIC
My Comm. Exp.: 9/1/94

Prepared by:

John C. Heath
Attorney at Law
Post Office Box 737
Livingston, TN 38570
(615) 823-1238
43043DW.2

TRACT NO.1 BEGINNING on a stone in Hestand line thence westward 40, P. to a stone in Sims and Hestand line; thence North 112, P. to a stone in Spivey's line; thence Northeast 52 P. to a Maple on west side of Little Trace Creek; thence Eastward with the meanders of the creek 74, P. to a stone on west side of creek; thence South 86, P. to the beginning corner, containing by estimation 43 acres, more or less.

TRACT NO. 2: BEGINNING on a double oak corner to this tract and in line of land now owned by Bill Cherry; thence Southward with said Cherry line to a stone at an old road Bransford Hestand's line; thence with said Hestand's line to a poplar corner to Wilmore Short and Harley Sweeza and Tom Johnson; thence with the meanders of creek to a water gate across said creek in Johnson's line; thence East with Johnson's line to the beginning containing forty-five acres, more or less.

EXHIBIT "A"

AGREEMENT

This agreement entered into this 20th day of April 1992 by and between Cornell Smith and Coell Hickman; Clay County Executive, as per resolution number 2 dated 04-18-92 wherein the Clay County Commission authorized and instructed the County Executive to enter into an agreement with Mr. Smith.

1. It is agreed that Mr. Smith shall be allowed to sell stock or issue individual shares of common stock to incorporate said landfill as Upper Cumberland Solid Waste Management, Inc. and shall be allowed to transfer permit number SNL141020250 to said corporation.

2. It is further agreed that the incorporation and the sale or issuance of stock in said corporation to Smith or other successors shall not constitute a sale as referred to in paragraph 10 of the prior contract between Cornell Smith and Clay County dated November 5, 1990 relating to the sale of the landfill and granting Clay County a right of first refusal. It is understood that any corporation which will have an ownership in or be involved in operation of said landfill agree to be bound by resolution number 2 dated 04-18-92.

3. Mr. Smith agrees to base the total average yearly amount of trash accepted at the landfill on compacted yardage rather than gate yardage, but never go over the average yearly compacted yardage in the description of facility and operations manual approved by the State of Tennessee and particularly without limitation by paragraph 11 in prior contract dated 11-05-90 between Cornell Smith and Clay County which requires monthly reports to be filed, and further that said monthly reports shall specify the compacted yardage so as to enable the county commission to monitor the remaining life of said landfill at all times, the corporation shall not be allowed to place any hazardous waste or any other wastes not allowed by state regulations in the landfill, it being the intent hereof specifically to include any nuclear wastes hazardous wastes as defined under state law, or any automobile batteries.

IN WITNESS WHEREOF, the parties have hereunto set their hands on the date first above written.

Cornell Smith
CORNELL SMITH

CLAY COUNTY, TENNESSEE

Coell Hickman
By: COELL HICKMAN
COUNTY EXECUTIVE

STATE OF TENNESSEE
COUNTY OF CLAY

Personally appeared before me, Ray Frogge, notary public, Cornell Smith and Coell Hickman, with whom I am personally acquainted, or proved to be on the basis of satisfactory evidence, and who acknowledged that he executed the within instrument for the purposes therein contained. Witness my hand and seal, at office, this 20 day of April, 1992.

Ray Frogge
NOTARY PUBLIC
My Comm. Exp.: 2-10-1996

APPENDIX G

APPENDIX G

**County Responsibilities Household Hazardous Waste Collection
Events in Tennessee**

**State of Tennessee Department of Environment and Conservation
Division of Solid Waste Assistance**

**COUNTY RESPONSIBILITIES
HOUSEHOLD HAZARDOUS WASTE COLLECTION EVENTS
IN TENNESSEE**

**POLICY GUIDE
AUGUST 1993**



**TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF SOLID WASTE ASSISTANCE**

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1. Introduction
2. Site Criteria
3. Containers for Nonhazardous Household Waste
4. Advertisement
5. County Site Representative
6. Procedures for Scheduling a Collection Event
8. Volunteers
9. Answers to 13 Commonly Asked Questions

Attachments

- I. List of Acceptable Materials
- II. List of Materials Specifically Excluded
- III. Sample Newspaper Ad
- IV. Sample Public Service Announcement

STATE OF TENNESSEE
POLICY OF NON-DISCRIMINATION

Pursuant to the State of Tennessee's policy of non-discrimination, the Tennessee Department of Environment and Conservation does not discriminate on the basis of race, sex, religion, color, national or ethnic origin, age, disability, or military service in its policies, or in the admission or access to, or treatment or employment in, its programs, services or activities.

Equal Employment Opportunity/Affirmative/ADA Action inquiries or complaints should be directed to the Tennessee Department of Environment and conservation, EEO/AA/ADA Coordinator, 401 Church Street, 21st floor, Nashville, TN 37243, (615) 532-0103.

Tennessee Department of Environment and Conservation. Authorization No. 327467. 400 copies. This public document was promulgated at a cost of \$.47 per copy. August 1993

INTRODUCTION

Three Responsibilities

As set forth in the Solid Waste Management Act of 1991, county government has three responsibilities to fulfill prior to and during a Household Hazardous Waste Mobile Collection Event. These concern the location, the advertising, and a site representative. To assist county government, the Division of Solid Waste Assistance has defined in this policy guide the minimum criteria for fulfilling these three responsibilities. The policy guide also sets forth the minimum criteria established for scheduling a Collection Event.

Program Integrity

The criteria herein are deemed appropriate for maintaining integrity of the Household Hazardous Waste Mobile Collection Program. The State of Tennessee will be liable for a set-up fee each time the household hazardous waste contractor services a county regardless of whether participants show up or not. The program can only realize its greatest benefits with the help and active participation of the county governments.

Criteria Flexibility

These criteria, including the information in all of the attachments, are subject to change based on the needs of the program and the needs of the counties being served. A county may request variances from this policy guide by requesting and justifying a variance in writing to the Manager of the Special Waste Section. The Division reserves the right to refuse household hazardous waste collection service to any county that does not put forth a reasonable effort to meet these criteria.

Manager, Special Waste Section
Division of Solid Waste Assistance
14th Floor, L & C Tower
401 Church Street
Nashville, TN 37243-0455

Restrictions

The Contractor is allowed to accept up to one hundred (100) pounds of acceptable household hazardous waste per household (per automobile). NO CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR OR SMALL QUANTITY GENERATOR WASTE WILL BE ACCEPTED.

Program Expiration

The Solid Waste Management Act of 1991 has a five year sunset provision. Counties are encouraged to use the State's Mobile Collection Program for Household Hazardous Waste to assist with the design of long-term programs which must be included in their Regional Solid Waste Plans.

I. Location

A. Site Criteria

The county will arrange a temporary site for the Collection Event. If the site is not county-owned, then the county will be responsible for all leasing arrangements. The leasing arrangements must be in writing and submitted to the Special Waste Section Manager 15 working days prior to the Collection Event. Seven to fifteen (7-15) days prior to the Collection Event, the county will allow the household hazardous waste collection contractor to inspect the site in order to finalize plans for the Event.

The collection contractor is willing to assist the county in evaluating and selecting sites at no cost. To arrange this assistance, please contact the Special Waste Section at (615) 532-0091 or ask for assistance in the written request for a household hazardous waste collection.

The temporary site should meet the following minimum requirements:

- * Be accessible by paved, gravel roads, or well maintained roads;
- * Be located conveniently to the majority of the county residents;
- * Possess a flat, asphalt or concrete working area of 100 ft X 100 ft minimum;
- * Accommodate a minimum of 15 parked cars nearby;
- * Have a clean water source within the working area;
- * Have toilet facilities (portable or permanent) within approximately 200 feet of the working area;
- * Have telephone access (portable or permanent) within approximately 50 feet of the working area; and,
- * Have accessibility to a grounded, 110 electrical outlet.

The county should have a site location in mind when it submits a request in writing to the State for the collection service. The request should identify any of the above criteria that are impossible for the county to meet. Deviations from the above criteria may possibly be arranged. The State reserves the right to disapprove a site that does not meet the above the criteria.

B. Containers for Nonhazardous Household Waste

The county will provide one or more waste containers for the collection of nonhazardous household waste at each Collection Event and provide for the proper disposal of the non-hazardous wastes. The county may also be required to empty the waste containers, at the county's expense, during the Collection Event hours of operation if necessary.

The county will coordinate with the household hazardous waste collection contractor for the location of these waste containers so as to be convenient to the collection contractor and inaccessible to the general public.

The county will have the right to place any restrictions on the use of the waste containers necessary to protect county interests (i.e., location, use, material sorting).

The State cannot hold the collection contractor responsible for any household hazardous or other waste found in the containers after the collection contractor's departure from the site. During the site clean-up it will be the county's responsibility to inspect the waste containers for questionable waste.

II. Advertisement

A Collection Event cannot be successful without advertisement. The county will advertise in one or more newspapers of general circulation the date, hours and location of the Collection Event. To qualify as newspapers of general circulation, the newspapers generally have to be published more for their news content rather than their ads and have a paid subscription.

The advertisement should be published once at least two (2) full weeks preceding the event date and preferably the week of the event also. It should also specify that only 100 pounds of waste will be accepted from each household during the event and specifically list the items excluded from the program as well as examples of acceptable items. The items excluded from collection are medical wastes, explosives, radioactive wastes, and dioxins including dioxin precursors. Lastly, the ad should also indicate that the collection and disposal costs will be paid by the State of Tennessee.

The county is advised to send a copy of the proposed ad, the name(s) of the paper(s) in which the ad will appear, and the advertisement date(s) to the Special Waste Section Manager five working days prior to the proposed advertisement date.

A suggested newspaper ad, a generic public service announcement, and a list of materials to be accepted and excluded in the Household Hazardous Waste Mobile Collection Event are attached to this policy.

It is the State's policy to encourage the county to educate its citizens concerning the proper use and disposal of household hazardous waste. The State encourages the county to use available means other than the required newspaper advertisement to communicate the characteristics of household hazardous waste, the consequences of improper disposal, and the ideology of reducing, reusing, and recycling household hazardous waste whenever possible.

The State's household hazardous waste collection contractor and the State are committed to assisting the county with its educational campaign prior to the Collection Event. The contractor and the State have educational materials available for use by the county. The State will coordinate educational and promotional activities with the county and contractor after a formal request for service has been received from the county.

III. County Site Representative

The site representative may be either a county employee or a person designated to represent the county during the Collection Event. The county will be responsible for paying any wages and expenses incurred by this site representative.

No minimum qualifications have been established for the site representative. However, the site representative should be someone who the county has confidence will safeguard any county property used by the collection contractor (primarily land and waste containers) and will manage problems that may arise during the Collection Event with the county-provided utilities and the nonhazardous waste containers.

A county representative must be on-site during the Collection Event's hours of operation and during the site clean-up. A county representative must also remain during the times the contractor is packaging the materials for shipment in case assistance is needed with site arrangements, utilities, or other problems. If the representative has to leave during the packaging, he should leave a number where he can be reached if needed.

The county should designate a backup representative who can be available to serve as a substitute or to share the responsibility should the Collection Event become lengthy.

The county representative will be asked to return to the site, regardless of the hour, to inspect the site clean-up prior to the contractor's exit from the site. The State will only hold the contractor responsible for any damages that are incurred as a result of the Collection Event operation. The county has the responsibility for documenting any damages to the site.

The representative may make suggestions for improving the site security provided by the contractor in cases where the contractor may leave hazardous materials and/or equipment on site overnight.

Assisting the contractor does not mean providing labor or materials required to fulfill the contractor's obligations. At no time will the county representative be asked to participate in any activity that puts him or her in contact with household hazardous waste.

The county should give the Special Waste Section Manager, in writing, the name of its designated site representative and the backup representative. This notification should also include the home and business addresses and telephone numbers of these representatives.

IV. Procedures for Scheduling a Collection Event

The Collection Events will be scheduled on a first-come, first-serve basis. The State reserves the right to make any and all scheduling changes that may be necessary. The procedures for scheduling are as follows:

- A. The County Executive will make a request in writing to the Manager of the Special Waste Section at least 30 days prior to the desired collection date. The letter should include the following:
 1. Request to be serviced by the State's Household Hazardous Waste Contractor.
 2. Indicate the date that the event is desired and at least one alternative date.
 3. Identify a contact person who will serve to coordinate the fulfillment of the county's responsibilities associated with the Collection Event. (This contact person and the site representative may be the same or different persons.)
 4. Identify (name and daytime telephone number) the site representative who will be on site during the day of the Collection Event.
 5. Identify proposed deviations from the minimum site criteria.
 6. Provide telephone numbers for the local law enforcement, emergency response, and nearest medical facilities and the address of the medical facilities.
 7. Provide a list of local environmental and service organizations and their phone numbers who may be able to provide volunteers for the Collection Event.
- B. The Division of Solid Waste Assistance will coordinate a Collection Event date with the contractor and the county contact person.

- C. Fifteen (15) working days or more prior to the Collection Event, the county should send the Special Waste Section Manager a written description of the site proposed for the Collection Event detailing the size, the arrangement and estimated proximity of the required utilities, and the address of and directions to the site. If the Collection Event is held on property not owned by the County, the agreement authorizing use of the site should also be included.
- D. Fifteen (15) working days prior to the Collection Event, the county should send the Special Waste Section Manager a copy of the proposed ad, the name(s) of the paper(s) in which the ad will be published, and the proposed advertisement date(s).

V. Volunteers

It is the State's policy to encourage but not to require county volunteers for the State's Household Hazardous Waste Collection Program. The household hazardous waste collection contractor will provide the labor necessary to receive, sort, pack, manifest, transport, and dispose of the collected materials. The State requires that this labor force be sufficiently trained to perform these functions and that the contractor be responsible for their personal safety and their insurance coverage. The collection contractor will also be responsible for directing the traffic flow through the site in a manner that facilitates the most efficient collection operation.

There will, however, be areas where volunteers can be used, and the county should make an effort to use the resources of these individuals or groups. These are the areas of surveys, nonhazardous household waste management, and publicity.

The State plans to ask participants in the Collection Event to complete a short survey form about how far the participants traveled, how long the materials have been stored, other items participants would want to see collected, and other such information. Volunteers can be responsible for dispensing and collecting the survey forms.

Since the county will be responsible for managing the nonhazardous household wastes such as cardboard boxes and plastic bags, the county may want to enlist volunteers to help with these wastes especially if they are to be processed for recycling. This will occur only after the contractor has removed the household hazardous wastes from such containers.

Volunteers can also be used to help with publicity for the Collection Event. They can be pass out brochures and post notices of the Collection Event at businesses willing to advertise for the county. They can also be used to make and post signs that direct participants to the Collection Event site.

After the county submits its request in writing to the State to schedule a Collection Event, the State will communicate with the county contact person concerning any interested volunteers.

The hazardous waste collection contractor will assist in coordinating volunteers and insuring their safety on site, as well as assist the county in contacting and recruiting organizations that can provide volunteer support. To initiate this assistance, the county should provide a list of local environmental and service organizations and their phone numbers to the Special Waste Section Manager along with the initial request for a Collection Event.

At no time will volunteers be asked to participate in any activity that puts them in contact with the household hazardous waste.

ANSWERS TO 13 COMMONLY ASKED QUESTIONS
TENNESSEE HOUSEHOLD HAZARDOUS WASTE PROGRAM
AUGUST 1993

1. What are the state's criteria for site selection?

In general, a county may use any location, owned or leased, within its borders that meets certain minimum criteria. The criteria concern proximity to necessary utilities and population centers. For further information, a copy of the policy is available upon request. It is entitled, "County Responsibilities, HHW Collection Events in Tennessee, 7/93". A copy may be obtained by calling the Special Waste Section at (615) 532-0091.

2. Can the county collect household hazardous waste at several locations within the county such as convenience centers and then bring the collected wastes to the collection site on the day of the Collection Event?

Even though it might encourage more participation, this action is not allowed because of the potential liability and added responsibility to the county. In order to remain legal, a county collecting household hazardous wastes at various locations would have to personally interview each participant and refuse paints, solvents, petroleum products, pesticides, cleaners, etc., from businesses. (Products that exhibit hazardous characteristics discarded by any business ARE regulated by Tennessee's Hazardous Waste Regulations.) The consequences of not properly screening could result in violation of state and federal transportation and handling regulations which could result in fines and other penalties. Additionally, a collection site always has the potential for becoming a superfund site if the household hazardous waste is spilled or burned. The county would be responsible for the clean-up costs and complying with all clean-up regulations. The county staff would also have the responsibility of interviewing participants for details about waste in unlabeled containers and giving these details to the State's contractor for identification purposes. Lastly, the county would be responsible for the disposal of any waste the State's contractor is unwilling to accept from the county.

3. How can households be made to drive across the county to participate in the Event?

Obviously a household cannot be made to participate or to save household hazardous wastes for collection. In fact, data generated by other states' programs show that the participation rate in a household hazardous waste collection may be low in spite of good advertising. However, the advertising and Collection Event itself begin an education process within the county on proper management of household hazardous waste. It is hoped that this education will prove beneficial to counties when counties develop their own programs for solid waste management and solid waste reduction as a part of their regional solid waste planning as well as provide an outlet for those items currently stored in garages and basements. It will be possible for the county to hold the Collection Event in a different location from one year to the next.

4. How often can Collection Events be scheduled?

Collection Events are scheduled on a first-come, first-served basis. The State intends to make this service available to all Tennessee counties covered under this program even though funds are limited. Due to financial and other constraints, when scheduling Collection Events, priority will be given to those counties who have not yet held a Collection Event. Counties which have held at least one Collection may be delayed in scheduling additional Events since the Contractor may be previously scheduled to attend other county Collection Events. There is no established minimum or maximum number of events that may be scheduled for any county. However, the State will not schedule more than one Event in a county during a Collection Event day. In other words, a county may not choose locations to hold simultaneous Events for a one day Collection Event. Furthermore, under no circumstances does the State recommend to counties that they collect and store household hazardous waste at any location within the county awaiting the next scheduled Collection Event by the State's Contractor.

5. Will unknown materials be accepted?

As far as the homeowner is concerned, unknown and unlabeled materials may be brought to the collection event. Homeowners should come prepared to share as much information possible about unlabeled materials to assist the contractor with proper identification. With such cooperation from citizens, there are few materials the contractor's chemists cannot identify. Any material that cannot be identified in the presence of the participant will be returned to the participant. (The contractor cannot properly transport or dispose of unidentified material.)

6. Will farm pesticides be accepted?

It is the intent that all households may participate, including farms. A farm household, like other households, is limited to bringing 100 pounds of total waste to the collection event. This total may include pesticides used on the farm provided that they are not subject to regulation by Tennessee's Hazardous Waste Management Regulations. In Tennessee, household hazardous waste is exempt from regulation, and the collection contractor is not allowed to commingle regulated waste with household hazardous waste. The collection contractor is responsible for determining whether a pesticide is regulated or not, and can advise a farmer on how to properly dispose of a pesticides that are regulated.

7. Will the county be responsible for any remaining household hazardous waste?

The contractor is required by his contract with the State to properly package and dispose of every household hazardous waste item accepted during the collection event. The contractor has the responsibility to reject any waste he is unable to legally dispose of while it is still in the possession of the owner. The contractor will be expected to accept all materials except those household wastes specifically excluded by contract and business generated wastes. The contractor will not be responsible for the removal and disposal of any non-hazardous household waste (ordinary solid waste).

8. What will the contractor do with the collected wastes?

The contractor disposes of the collected household hazardous wastes at privately-owned facilities that have licenses and permits to dispose of hazardous waste. These facilities may include incinerators, chemical waste landfills, or recycling processors. The contractor will be allowed to choose the facilities he uses. The State will only reimburse the hazardous waste contractor for waste disposed of by licensed and permitted disposal facilities.

9. Will the wastes be disposed of in my county?

All wastes are to be disposed of at privately owned facilities licensed and permitted for hazardous waste disposal. The contractor will have to ship the wastes to such facilities, even out of state if necessary, in order to comply with this requirement. There is no obligation on the county's part to provide the collection contractor with a licensed and permitted disposal facility within the county's borders.

10. Will there be records that document where the contractor disposed of the wastes?

The contractor is obligated by the terms of his contract to submit to the State certificates of disposal from licensed and permitted disposal facilities in order to receive payment for the services rendered. These certificates are required 30 days from the date of the collection event. The State will compare the quantities of wastes disposed with the quantities of wastes manifested for shipment during the collection event.

11. Will the contractor provide insurance for the collection event?

The contractor is required by his contract with the State to accept all legal responsibility for the safety and well-being of all persons and property on site during the collection event. The contractor is required to carry certain types and amounts of insurance necessary to cover this liability, and has the right to restrict any of the work areas from the general public.

12. How is this collection program funded?

The household hazardous waste mobile collection unit program is funded from the Solid Waste Management Fund. This fund was established by the Solid Waste Management Act of 1991. The fund is financed by the \$1.00 predisposal fee collected on the retail sale of new automotive tires in Tennessee, and an \$0.85 surcharge per ton on waste being dumped in Tennessee landfills. In addition to the household hazardous waste collection program, the monies from the Solid Waste Management Fund are used to fund all other programs established by the Solid Waste Management Act of 1991. These include a grant program for county recycling equipment, grants for landfill scales and tire storage sites, and for the waste tire shredding program.

13. How was the contractor selected?

The contractor was selected through a proposal evaluation process. Each contractor was required to submit a proposal on a specified time and date for evaluation purposes. A Request for Proposal (RFP) was mailed to 64 companies in the hazardous waste industry 42 days prior to the required proposal submission date. The RFP defined the requirements of the program and specified the information required in the proposal. The potential household hazardous waste contractors were required to discuss their experience in household hazardous waste collection, their company organization, the technical aspects of their proposed service to Tennessee, and the cost to the State for the service. Each of these sections were evaluated by a separate group of Department employees and the results of these sections were summed to a total. A contract was awarded to the contractor receiving the most points from the evaluation.

ATTACHMENT # I

LIST OF ACCEPTABLE MATERIALS

HOUSEHOLD HAZARDOUS WASTE MOBILE COLLECTION AND DISPOSAL PROGRAM

I. Household Cleaners

- a. Drain Openers
- b. Oven Cleaners
- c. Wood and Metal Cleaners and Polishes
- d. Toilet Bowl Cleaners
- e. Disinfectants

II. Automotive Products

- a. Oil and Fuel Additives
- b. Grease and Rust Solvents
- c. Carburetor and Fuel Injector Cleaners
- d. Air Conditioning Refrigerants
- e. Starter Fluids
- f. Body Putty
- g. Anti-Freeze/Coolant
- h. Waste Oil

III. Home Maintenance and Improvement Products

- a. Paint Thinners
- b. Paint Strippers and Removers
- c. Adhesives
- d. Paint

IV. Lawn and Garden Products

- a. Herbicides
- b. Pesticides/Rodenticides
- c. Fungicides/Wood Preservatives

V. Miscellaneous

- a. Batteries
- b. Fingernail Polish Remover
- c. Pool Chemicals
- d. Photo Processing Chemicals
- e. Medicines/Drugs
- f. Reactives (aerosols/compressed gas)

ATTACHMENT #II

LIST OF MATERIALS SPECIFICALLY EXCLUDED

FROM THE HOUSEHOLD HAZARDOUS WASTE MOBILE COLLECTION AND DISPOSAL PROGRAM

- I. Medical Waste (as defined by Tennessee Rule 1200-1-7-.01(2))
- II. Explosives or Ordnance (e.g., ammunition, DOT Class A, B, or C explosives)
- III. Highly Radioactive Compounds (e.g., plutonium, uranium)
- IV. Dioxin Precursors (e.g., 2,4,5-TP)

Attachment # III

HOUSEHOLD HAZARDOUS WASTE
COLLECTION EVENT

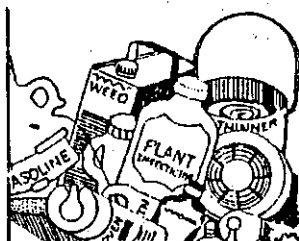
Tennessee Department of
Environment and Conservation and
_____ County will conduct a
Household Hazardous Waste Collection
Event at the following time and
place:

(day and date)

(location)

(time)

(map to site)



Hazardous waste may be found in every household in our county. This is your opportunity to properly and safely dispose of items such as paints, solvents, cleaners, pesticides, automotive fluids, batteries, and aerosols. There is a limit of one hundred pounds per household. The collection program is free to all households in _____ County.

FOR MORE INFORMATION CALL:

(name)

(telephone number)

NO MEDICAL WASTE, EXPLOSIVES OR
ORDNANCE, RADIOACTIVE COMPOUNDS,
OR DIOXINS WILL BE ACCEPTED.

PUBLIC SERVICE ANNOUNCEMENTS

ASK YOURSELF, ARE THERE ANY HAZARDOUS MATERIALS IN YOUR HOME? THE ANSWER IS PROBABLY "YES". EVERY DAY PRODUCTS LIKE USED MOTOR OIL, PAINTS, AND BUG KILLERS ALL MAY POLLUTE OUR DRINKING WATER IF NOT DISPOSED OF PROPERLY. TENNESSEE DEPARTMENT OF ENVIRONMENTAL CONSERVATION AND _____ COUNTY'S HOUSEHOLD HAZARDOUS WASTE COLLECTION EVENT TO BE HELD ON _____ AT _____ WILL PROVIDE YOU WITH AN OPPORTUNITY TO PROPERLY MANAGE AND DISPOSE OF YOUR HOUSEHOLD HAZARDOUS WASTE. FOR MORE INFORMATION ON WHAT WASTE WILL AND WILL NOT BE ACCEPTED, CALL _____ AT _____

SAMPLE

**STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF SOLID WASTE ASSISTANCE**



**USED OIL COLLECTION AND RECYCLING
PROGRAM POLICY GUIDE**

**JANUARY
1994**

Pursuant to the State of Tennessee's policy of non-discrimination, the Tennessee Department of Environment and Conservation does not discriminate on the basis of race, sex, religion, color, national or ethnic origin, age, disability, or military service in its policies, or in the admission or access to, or treatment or employment in, its programs, services or activities.

Equal Employment Opportunity/Affirmative Action/ADA inquiries or complaints should be directed to the Tennessee Department of Environment and Conservation, EEO/AA/ADA Coordinator, 401 Church Street, 21st floor, Nashville, TN 37243 (615) 532-0103

Tennessee Department of Environment and Conservation, Authorization No.327493, 500 copies.
This public document was promulgated at a cost of \$0.47 per copy. February 1994.



INTRODUCTION

The Used Oil Collection Act of 1993 (TCA 68-211-1001) was enacted by the General Assembly to reduce the amount of used oil that is improperly disposed of by Tennessee "do-it-yourself" automotive oil changers. The act provides incentives to educate the public and increase the number of used oil collections across the state. The act established a used oil collection fund (\$.02 per quart fee levied at the wholesale level on sales of oil in packaged form) to be used in part to establish used oil collection centers. Another requirement in the act is that a toll free number be established (1-800-287-9013) for use by do-it-yourselfers to obtain information on used oil collection centers and programs. The act also ties in with the Solid Waste Management Act of 1991 (TCA section 68-211-866 (b)) which requires all counties to provide at least one site to collect used oil and other automotive fluids by January 1, 1995 unless adequate sites are otherwise available for use by the citizens of the county.

One of the purposes of this policy guide is to provide used oil collection centers with general information concerning several items of importance and good management practices which must be met in order to qualify for grant funding through our program. It is not, nor is it intended to be, a regulatory manual. Questions concerning regulatory or possible regulatory matters should be directed to the Division of Solid Waste Management at (615) 532-0780. Questions concerning grants or grant guidelines should be directed to the Division of Solid Waste Assistance (615) 532-0091. Questions concerning technical matters regarding this program should be directed to the Division of Solid Waste Assistance, Special Waste Section (615) 532-0281.

1. Used Oil Collection Centers

A. Definitions:

Tennessee Code Annotated, Section 68-211-1002 (4), (8), and (9), defines used oil, used oil collection centers and do-it-yourselfers as follows:

"Used oil" means any oil which has been refined from crude or synthetic oil and, as a result of use, becomes unsuitable for its original purpose due to loss of original properties, or presence of impurities, but which may be suitable for further use and may be economically recyclable. Used oil does not include oil filters; and

"Used oil collection centers" means a facility, including fixed locations, tanks and containers, which accepts used oil from DIYers and which constitutes an approved centralized collection center for used oil".

"Do-it-yourselfer (DIYer)" means an individual who removes used oil from the engine of a light duty motor vehicle, small utility engine owned or operated by such individual, noncommercial motor vehicle or farm equipment".

Since counties are required by the Solid Waste Management Act of 1991 to provide at least one site to collect used oil, the Used Oil Collection Act of 1993 provides for collection center grants to counties, cities, profit and non-profit organizations to assist with establishing these sites.

B. Provisions for Inclusion in State's Used Oil Collection Database:

The Division of Solid Waste Assistance has established a toll-free telephone used oil information network. To be included in the database, each collection site must sign an agreement form (see attachment #1) agreeing to accept used oil from local do-it-yourself oil changers. Upon signing and returning the agreement form, the site's name and location will be given to citizens who call the division's toll free number looking for a collection center in their area. The division will provide the site with a used oil collection sign to post at its facility (see attachment #2) as required by the act. County and local government-owned and operated collection/aggregation facilities are not required to complete an agreement form since these facilities are publicly owned and are established for the express purpose of accepting do-it-yourselfer used oil. Two reasons that a used oil collection center site/facility may be removed from the division's database are as follows:

- a. Receiving three (3) verifiable complaints from the public against the center owner/operator.
- b. Being advised by Division of Solid Waste Management personnel or other regulatory agencies of a regulatory violation citation against the facility.

(Note- There may be other reasons deemed as necessary and/or appropriate by the Division of Solid Waste Assistance for removal of a site from the database. With the exception of a regulatory violation, the division will attempt to notify the site operator of the reason(s) prior to removal.)

If the division receives three or more complaints against the center, Special Waste Section personnel will contact the operator to discuss and resolve the complaints. If a resolution does not result, the center will be removed from the database until the division has been assured that the problem(s) have been or will be corrected. Any further complaints of the same nature will result in automatic removal of the facility's name without prior notice. Notice of regulatory violations will result in automatic removal of the facility's name from the database without prior notice. Removal of the violation does not ensure reinstatement on the database. If the collection center/site is removed from the division's information system and the site was established using funds obtained through a program grant, the grantee may be required to repay (pursuant to the terms and conditions of the grant agreement) those funds.

C. Collection/Storage Tanks:

The collection/storage tank or container may include a compartment for the collection and storage of used oil filters. Collection/storage tanks and containers are subject to and must comply with regulations established under Rule Chapter 1200-1-11-.11 of the rules and regulations of the State of Tennessee which adopted by reference 40 CFR part 279. Underground storage tanks or containers are not recommended and will not be considered for grant funding. If existing underground tanks are used for collection and storage of used oil, the operator should be aware that these tanks are subject to standards for used oil stored underground and all fill pipes must be labeled "USED OIL ONLY". Site preparation for placement of the container/tank should include a concrete slab or other similar impermeable and oil resistant material. It is recommended that the pad on which the tank is placed have a berm or other containment device (see attachment #3) to collect used oil in the event of a spill. Use of the following guidelines may assist with determining the size of the spill containment area:

The height of the berm should be one (1) foot. In order to determine the spill containment area in cubic feet, divide the total storage capacity of the tank by 7.48 (the number of cubic gallons in a cubic foot). This formula will

provide you with the recommended size of the containment area. (Example: A 300 gallon storage tank should have a spill containment area of 40 cubic feet).

Spill containment areas may also collect rainwater. If this water contains spilled oil, proper disposal procedures/methods must be followed. One method may be to contact the local wastewater treatment facility and request their assistance with proper disposal. Failure to properly dispose of used oil or water polluted with oil may result in a regulatory violation.

The division recommends that aboveground collection/storage tanks be used which meet or exceed the following specifications:

1. Double wall containment, 110% containment capacity
2. Reservoir capacity of 300 gallons
3. Lockable, rain-proof lids and access doors
4. "Stand alone" tank requiring neither roofing or other structural cover
5. Oil level monitoring gauge
6. Corrosion proof, maintenance free exterior shell
7. Built-in, deep-well sink with removable debris screen (dual debris screens preferred)
8. Automatic shut-off mechanism to prevent overflow
9. All stainless steel or galvanized exterior hardware
10. Universal, two (2) inch quick disconnect fitting (preferably exterior access) for easy service by oil transporters with a vacuum hose tank truck
11. Movable (empty only) by hoist truck or forklift
12. Vented to prevent the build-up of harmful gases
13. Meets National Fire Protection Association (NFPA) 30 code specifications
14. Aboveground tank exterior must be prominently labeled as "USED OIL ONLY"
15. Manufacturer's comprehensive operations manual supplied with each unit
16. Manufacturer's warranty of at least one (1) year against defects or failure

17. Manufacturer's statement of the recycled material content as well as the recyclability of the tank at disposal

Collection/aggregation sites with a single aboveground storage tank exceeding a capacity of 660 gallons or more and/or the combined tank (multiple tanks) capacity of a facility that exceeds 1,320 gallons are subject to further regulation. Contact the Division of Water Pollution Control to determine specific requirements and regulations. (NOTE: For information purposes only. The division does not intend to provide funding for sites with tanks and/or capacities that fit this criteria.)

Other considerations for site preparation (such as soil conditions, proximity to surface or groundwater in the area, etc.) should be evaluated and determined.

D. Site Operations:

Each used oil collection site must be registered with the Division of Solid Waste Management. All collection sites must post their hours of operation, and insure that a responsible employee is present at all times during these hours. The tank(s) must be secured during the off-hours to insure against improper oil disposal or vandalism. The facility should also conspicuously post a sign alerting the public to avoid contamination of the used oil by not mixing any other materials with the used oil brought to the facility. Fire extinguishers capable of fighting petroleum fires should be placed at strategic locations at the site. "No Smoking" signs should be posted. The site should have a communication device capable of alerting the local fire department in the event of a fire or other emergency. Vermiculite or other absorbents should be available to absorb small spills.

Although used oil collection sites may be established at public or private locations, local governments should consider establishing the used oil collection site at convenience center locations. This will eliminate unnecessary additional costs for site preparation and will provide access to residents at a familiar location. The intent of the law is to have at least one collection site in each county. However, the number of these sites may vary according to need. Local governments must also establish their programs consistent with their regional solid waste plan as required by the Solid Waste Management Act of 1991.

It may be permissible for local governments to contract for used oil and other automotive fluids collection (TCA section 68-211-866(b)). However, there must be a written contract between the parties that identifies the legal responsibilities of each party. A copy of this contract must be on file with the Division of Solid Waste Assistance.

The Department of Environment and Conservation will provide on request, a sign which identifies used oil collection centers (T.C.A. 68-211-1017).

Operation of the attended site must be in compliance with the management standards established by the Division of Solid Waste Management (T.C.A. 68-211-1013).

In the event of a release of used oil to the environment at a used oil collection center, cleanup steps must be performed as stated in T.C.A. 68-211-1018. Immediately notify the Division of Solid Waste Management and Water Pollution Control at the field office serving your area (see attachment #4) that a release has occurred.

Operators must determine if they will accept and choose the option under which they will be process used oil filters at their used oil collection center. NOTE: Collection and/or processing of used oil filters requires a permit issued by the Division of Solid Waste Management.

Tennessee Code Annotated, Section 68-211-1019, states that "Used oil filters shall be:

- (1) Punctured and hot-drained for a minimum of twelve (12) hours;
- (2) Punctured and cold-drained for a minimum of twenty-four (24) hours;
- (3) Drained and crushed; or
- (4) Prepared for disposal as otherwise provided by rules and regulations promulgated by the Solid Waste Disposal Control Board.

Subsequent to such draining, draining and crushing or other preparation for disposal, such filters shall be recycled or disposed of in accordance with the provisions of the "Used Oil Collection Act of 1993".

The Division of Solid Waste Management has identified three (3) options that used oil generators may exercise in disposing of used oil filters.

Option 1:

Used oil filters are exempt from regulation as a hazardous waste if both the metal from the filters and the used oil from the filters are recycled. To qualify for the scrap metal recycling exemption, free flowing oil must be removed from the filters through draining and crushing or disassembly of the filter prior to shipping to a metal recycler. Under the used oil recycling exemption, the physical processing of the filters

(draining, crushing and/or transporting) is not subject to regulations and may be conducted by the generator or another party at a different location. If the filter is disassembled, the remaining material is being granted a statewide special waste approval if the filter element is mechanically compressed to remove all free flowing oil and the oil is collected for recycling. The generator then certifies that the filter element and gaskets are non-hazardous and all free flowing oil has been removed.

Option 2:

Drain and Crush the Filters, Recycle the Oil, and Dispose of the Filters as Special Waste. A statewide "special waste" approval can be granted for all used oil filters that are certified as non-hazardous and which have been properly drained and crushed, eliminating all free flowing oil. The oil removed during the draining and crushing must be collected and properly recycled. Under the used oil recycling option, the physical processing of the filters (draining, crushing and/or transporting) is not subject to regulation under the hazardous waste regulation and may be conducted by the generator or by another party at a different location.

Option 3:

Dispose of the Filter as a Hazardous Waste. If a generator chooses not to recycle or crush oil filters, then the filters are handled as a hazardous waste. Special waste approval will not be granted for undrained and uncrushed filters. Any oil which drains from the filters must be disposed of as a hazardous waste if it is not recycled.

Exception: Terne-plated oil filters must be treated as a hazardous waste and cannot be recycled due to their lead content. The manufacture of terne-plated oil filters is being eliminated from the market.

Of the options described above, option 1 is the method preferred by the Division of Solid Waste Management for dealing with used oil filters. Used oil collection centers may wish to collect used oil filters on site and negotiate the processing (draining, crushing, etc.) and recycling of oil filters with their used oil transporter. In addition, counties and local governments may wish to apply for Recycling Equipment Grants when they are available, which would allow for the purchase of the equipment to process the filters on site. Contact the Division of Solid Waste Assistance at (615) 532-0087 in order to determine the availability and eligibility of these grants.

E. Participant Volume Limits:

The collection center/site may accept used, uncontaminated do-it-yourselfer oil from any person in any one (1) day up to a maximum quantity of 5 (five) gallons per person, per day. To receive a used oil collection center identification number (ID) from the Division of Solid Waste Management or grant funding from the Division of Solid Waste Assistance, this criteria must be observed.

To minimize the risk of an operator receiving contaminated oil, the Division recommends implementing one or more of the following procedures:

1. Maintain a log of participants and quantities of used oil received at the facility.
2. Request frequent or otherwise suspicious participants to complete a form containing their name, address, auto tag number, and signature.
3. Randomly test used oil received from participants. Inexpensive test kits may be purchased for this purpose. Such test kits are eligible under the used oil collection center grants.

F. Used Oil Transporters:

Used oil collection centers shall transfer used oil only to certified transporters in possession of a valid United States Environmental Protection Agency identification number and shall maintain records of all volumes of material collected on an annual basis, including the identity of the hauler and the name and location of the recycling facility to which the oil was transported (T.C.A., Section 68-211-1014).



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
401 Church Street
Nashville, Tennessee 37243
DIVISION OF SOLID WASTE ASSISTANCE
USED OIL COLLECTION CENTER
DATABASE ENTRY

TO:

Special Waste Section
Division of Solid Waste Assistance
Tennessee Department of Environment and Conservation
14th Floor, L & C Tower
401 Church Street
Nashville, TN 37243-0455

I have reviewed and do hereby verify that the following information is accurate as of this date or should be revised as indicated. I agree to update this information when necessary.

I understand this database information will be furnished verbally and/or in writing to do-it-yourselfers who call Tennessee's toll-free number for used oil information. I further understand that inclusion on the database neither signifies endorsement by the State of Tennessee nor that this site is in regulatory compliance.

FACILITY NAME: _____

STATE ID NUMBER*: _____

ADDRESS: _____

PHONE NUMBER: (____) _____

HOURS OF OPERATION: _____

NAME (Please Print): _____

SIGNATURE: _____

TITLE: _____ DATE: _____

* Effective 2/13/94, all used oil collection centers are required to register with the state.

Attention Do-It-Yourselfers

RECYCLE USED AUTOMOTIVE OILS HERE

Tennessee law requires you to properly dispose of used automotive oil and oil filters.

Note: Commercial handlers of used oil and oil filters may be subject to more stringent requirements than those specified for do-it-yourselfers.



Tennessee Department of Environment and Conservation, Authorization No. 327475
500 copies. This public document was promulgated at a cost of \$2.19 per copy.
August, 1993.

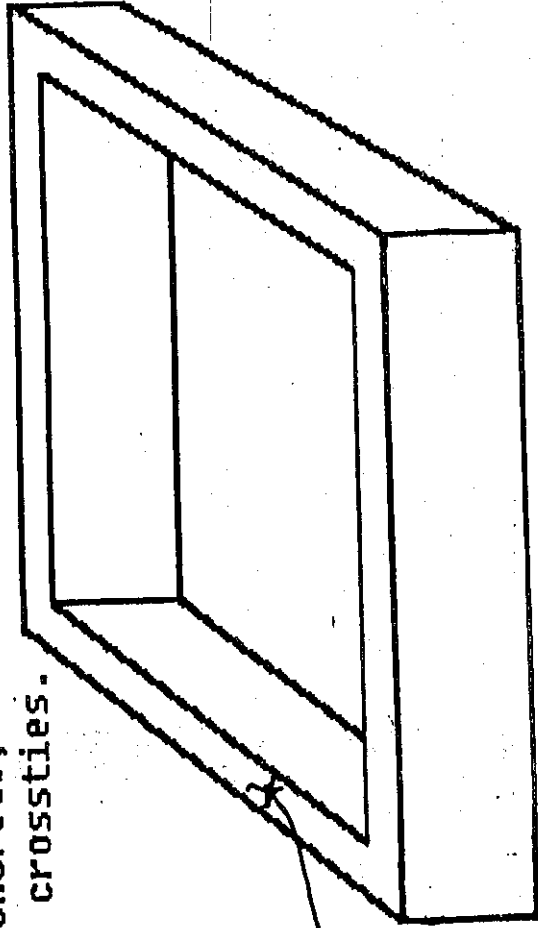
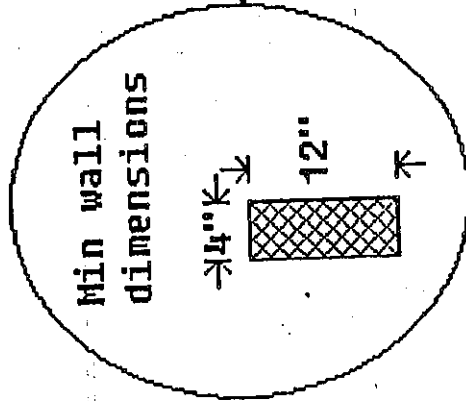
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♻️ RECYCLED PAPER

(ACTUAL SIZE 11" x 17")

USED OIL SITE CONTAINMENT

Containment border can be fabricated from concrete, asphalt, block or crossties.

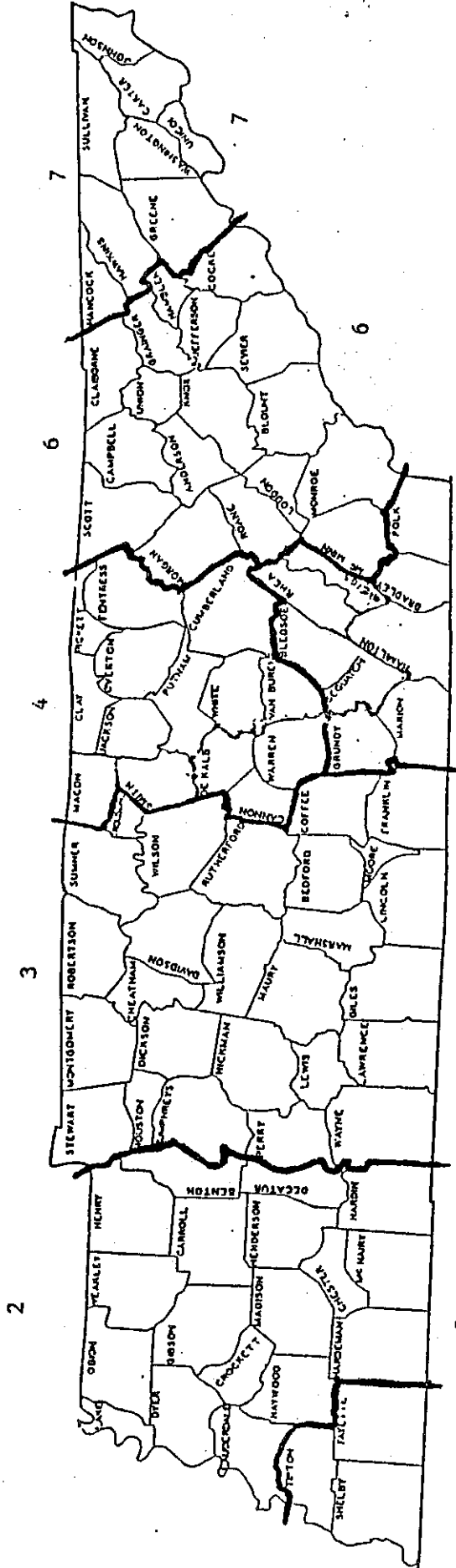


A filler must be used such as sand, gravel or mulch if the containment area is lined. A filler is optional if the containment area is sealed.

All containment areas must be lined with a 6 mil polyethelene barrier or sealed with an oil retardant epoxy.

SOLID WASTE MANAGEMENT

Attachment #4



CENTRAL OFFICE

Dept. of Environment & Conservation
 Division of Solid Waste Management
 Fifth Floor, L & C Tower
 601 Church Street
 Nashville, Tennessee 37243-1535
 Phone: (615) 237-7018 (in Tenn. only)
 Fax: (615) 532-0780
 Fax: (615) 532-0614

FIELD OFFICES

Mark Thomas - Manager
 Division of Solid Waste Management
 2500 Mt. Moriah, Suite E-645
 Perimeter Park
 Memphis, Tennessee 38115-1511
 (901) 543-6695
 Network: 8-360-6695
 Fax# (901) 543-7909

2. Randy Harris - Manager
 Division of Solid Waste Management
 295 Summar Avenue
 Jackson, Tennessee 38301
 (901) 423-6600
 Network: N/A
 Fax # (901) 423-6484

3. Loye Rowland - Manager
 Division of Solid Waste Management
 537 Brick Church Park Drive
 Nashville, Tennessee 37243-1550
 (615) 741-0654
 Network: 8-840-0654
 Fax # (615) 741-8941

4. Barry Atnip - Manager
 Division of Solid Waste Management
 1221 South Willow Avenue
 Cookeville, Tennessee 38501
 (615) 432-4015
 Nashville Number (615) 741-1892
 Fax # (615) 432-6952

5. Guy Moose - Manager
 Division of Solid Waste Management
 State Office Bldg., Suite 550
 540 McCallie Avenue
 Chattanooga, Tennessee 37402
 (615) 634-5745
 Network: N/A
 Fax # (615) 634-6389

6. Jack Crabtree - Manager
 Division of Solid Waste Management
 2700 Middlebrook Pike, Suite 220
 Knoxville, Tennessee 37921-5602
 (615) 594-6035
 Network: 8-250-6035
 Fax # (615) 594-6105

7. Larry Gilliam - Manager
 Division of Solid Waste Management
 900 North State of Franklin Road
 Johnson City, Tennessee 37604-3621
 (615) 928-6487
 Network: 8-615-854-5382
 Fax # (615) 928-2187