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**SEVIER COUNTY  
SOLID WASTE REGIONAL PLAN**

**As Required By**

**The Solid Waste Management Act of 1991**

**T.C.A. 68-211-813 (c) and 68-211-815**

**Sevier Solid Waste Regional Board**

**July 1, 1994**

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# SEVIER COUNTY SOLID WASTE REGIONAL PLAN

## **Introduction:**

The Solid Waste Management Act of 1991 required the formation of municipal solid waste planning regions, based on the recommendations of a District Needs Assessment prepared under the leadership of the state's nine Development Districts. The planning regions were formed by the end of December 1992.

The purpose of the District Needs Assessment was threefold: (1) to carry out an inventory and analysis of the existing solid waste management system; (2) to define needs for additional services and facilities for the next ten years; and (3) to recommend rational waste disposal areas, which would provide the nucleus for a municipal solid waste planning region.

The purpose of the regional plan is to set forth how planning regions will meet these needs. The regional plan is based on the inventory of facilities, services and programs provided in the District Needs Assessments. The planning region defines its specific needs--quantitatively.

It was only necessary to revise the data collected in the District Needs Assessment when there was a significant change in waste generation or management capacity, in the intervening year, which was not projected in the Assessment (for example, the sudden closure of a major industry, or construction of a new processing facility). The regional plan utilizes Tables from the District Needs Assessments, where appropriate.

The regional plan is more specific and more detailed than the District Needs Assessment. The regional plan addresses all required plan elements and follows the organization format set forth in the Guidelines for Preparation of a Municipal Solid Waste Regional Plan, prepared by The Tennessee State Planning Office. Much of the plan consists of narrative and may be supported by tables, figures, and maps prepared by the Region. The planning horizon is 1994-2003.

The plan consists of three parts: (1) an Executive Summary; (2) a detailed plan; and (3) Appendices.

The plan was submitted to the State Planning Office by July 1, 1994, after a public hearing had been conducted in the Region.

The Statutory Authority requiring preparation of the plan and describing its content is found in the following sections of the Tennessee Code Annotated: T.C.A. Sections 68-211-813(c); 68-211-814(a); 68-211-814(b)(6); 68-211-815; 68-31-851(b); 68-211-861(f); 68-211-842; 68-211-871(a) and (b); and indirectly, in 68-211-866(b); and 49-7-121.

## EXECUTIVE SUMMARY

Sevier County is located in the eastern portion of Tennessee and serves as the gateway to the Great Smoky Mountains National Park. The county and municipalities in the region include: Sevier County, Sevierville, Pigeon Forge, and Gatlinburg. The total area in the Region of Sevier County is 592.3 square miles.

Sevier Solid Waste, Incorporated was formed in December, 1988 as an intergovernmental agency to manage the disposal of solid waste in Sevier County. The Board of Directors consists of the Sevier County Executive and the city managers of Sevierville, Pigeon Forge, and Gatlinburg. Each governmental entity shares proportionally in the annual budget for Sevier Solid Waste according to the percent of waste brought to the facilities the previous fiscal year.

During 1990, the corporation began working with the Tennessee Local Planning Assistance Office to develop and implement a comprehensive solid waste plan. After numerous public hearings and unanimous approval by the governmental entities and the planning commissions, the Sevier County solid waste plan was officially adopted in October, 1990. Because of the waste flow patterns unique to Sevier County caused by the influx of tourists during June through October and because the county has over 170 tons per day of waste, Sevier County chose to develop its own economically feasible waste plan.

With the completion of the facilities recommended in the plan, the Region of Sevier County has realized a 70.2 percent recycling/reduction rate in 1993. These facilities include a composting plant for sewage sludge and municipal solid waste, a Class IV landfill for demolition waste, a recycling warehouse for corrugated paper recycling, drop-off centers for recycling of plastic, aluminum, newspaper, and motor oil, and a new Class I sanitary landfill for the residual materials.

All municipal solid waste, sewage sludge, and restaurant grease in Sevier County is brought to the composting plant for processing. The organic fraction of the wastestream (paper, food waste, sewage sludge, and grease) is decomposed into compost by naturally occurring microorganisms under controlled conditions; in other words, allowing nature to break down the waste by providing a near-perfect environment for this natural process to occur.

Ferrous metals are separated magnetically from the residual material and sent to Southern Alloy in Rockwood for recycling. During 1994, it is anticipated that an aluminum separation system will be added to the plant facilities further reducing the amount of residual material (consisting mainly of plastic and textile materials) to be landfilled.

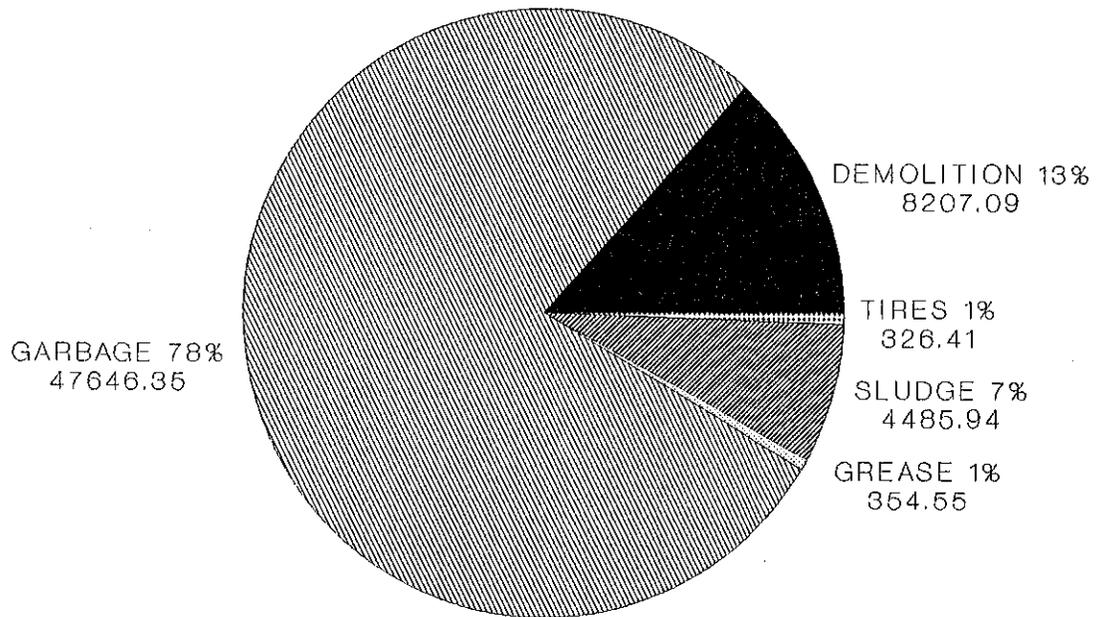
In 1992, Sevier Solid Waste began operating a Class IV demolition landfill for the 12 to 15 percent of the wastestream consisting of these materials. At this site, metal items (including white goods) are placed in a roll-off container and sent to Morristown Shredders for recycling. Wooden pallets are stockpiled and given to Newport Pallet to be reused. Other wood waste, such as brush, is mulched by utilizing a ten foot tub grinder and given to local residents free of charge. The site also contains a state-permitted tire storage area. Tires are shredded periodically by the

state contractor and stockpiled for future market development.

In June, 1993, Sevier Solid Waste began operating a source-separated corrugated paper recycling program. The paper is collected from local businesses and brought to recycling warehouse located next to the composting plant. At the warehouse, the paper is baled and shipped to Rock Tenn Paper Company in Chattanooga. Approximately 30 tons of paper per month is being recycled in this manner.

In addition, Sevier Solid Waste provides drop-off containers for local residents to deposit aluminum, plastic, newspaper, and used motor oil.

# 1993 SEVIER COUNTY WASTESTREAM



TONS

## CHAPTER I.

# DESCRIPTION OF THE MUNICIPAL SOLID WASTE REGION

### A. GENERAL DESCRIPTION

Sevier County is located in the eastern portion of Tennessee and serves as the gateway to the Great Smoky Mountains National Park. The county and municipalities in the Region include: Sevier County; Sevierville, Pigeon Forge, and Gatlinburg. The total area in the Region of Sevier County is 592.3 square miles. The major physiographic features of Sevier County include: the Little Pigeon River; Pigeon River; and Douglas Lake; English Mountain; and the western portion of the Great Smoky Mountains National Park. The elevation, outside the park, varies from 942 feet above sea level to more than 2,300 feet. The average precipitation is 54.7 inches, varying slightly with elevation and reaching more than 84 inches a year on the upper peaks of the Smokies. The annual average snowfall is 20 inches.

With a large portion of Sevier County consisting of the Great Smoky Mountains National Park, tourism has become the dominant industry. In recent years, there has been a tremendous increase in commercial and residential development. This growth has placed an added burden on one of the most needed public services, solid waste disposal. Sevier County and its municipal governments have taken steps to better manage solid waste issues through a well planned comprehensive solid waste management approach adopted and implemented by the authority responsible for solid waste disposal, Sevier Solid Waste, Incorporated.

### B. RATIONALE FOR REGION FORMATION

During the 1980s, the City of Gatlinburg owned and operated the landfill that serviced the entire county. It became apparent in 1988 that the Gatlinburg landfill would soon reach its capacity and options other than the existing landfill required investigation.

In December, 1988, Sevier Solid Waste, Inc. was formed as an intergovernmental venture to manage the waste disposal problems of Sevier County. The Sevier County Executive and the city managers of Gatlinburg, Pigeon Forge, and Sevierville were appointed as the Board of Directors. During 1990, the corporation began working with the Tennessee Local Planning Assistance Office to develop and implement a comprehensive solid waste plan. The Local Planning Office extensively researched the management of the landfill, the waste generation rates of the municipalities and county and a breakdown of the wastestream, and alternative waste disposal methods. The Board of Directors worked to develop goals and objectives, that were consistent with community ideals, to be used in planning for the solid waste program.

After numerous public hearings and unanimous approval by the governmental entities and the planning commissions, the Sevier County solid waste plan was officially adopted in October, 1990. By October 1991, the composting facility, recycling warehouse, demolition landfill, and other facilities recommended in the solid waste plan were operational. With over 170 tons per day of waste, based on a seven day workweek, Sevier County has enough waste to develop an economically feasible system on its own (Current costs are 30 dollars per ton).

### C. INSTITUTIONAL STRUCTURE

The description of the institutional structure of the Sevier Solid Waste Regional Board includes details on individual members, their authority and duties. The Board members, their representation and term of office are listed as follows:

<u>Member</u>	<u>Representation</u>	<u>Term of Office</u>
Cindy Cameron Ogle	Gatlinburg ( <i>Chair</i> )	1
Larry Waters	County ( <i>Vice-Chair</i> )	1
Earlene Teaster	Pigeon Forge ( <i>Secretary</i> )	1
Jim Wagner	Sevierville	

The Solid Waste Board coordinates with local government by having City and County representatives on the Board. Both City and County representatives report to their respective councils or commissions. Monthly board meetings are advertised and the public is encouraged to attend. A Solid Waste Advisory Committee was also established in 1988 to further link the Solid Waste Board with the public.

### D. DEMOGRAPHICS

The current population for the Region, according to U.S. Census Bureau projections, is noted below. The following Tables also feature data on average population density, population distribution, housing occupancy, and projected populations.

Name of Region: Sevier County

Regional Population: 54,586 (1993)

Regional Area: 592.3 square miles

**Table I-1**

**Average Population Density**

<b>County</b>	<b>Area (Sq. Miles)</b>	<b>1993 Population</b>	<b>Avg. Density Population/sq.miles</b>
Sevier	592.3	54,586	67.2
<b>Regional Total</b>	<b>592.3</b>	<b>54,586</b>	<b>67.2</b>

**Table I-2**

**Distribution of the Total Regional Population by Urban and Rural Areas  
(1993 Projection)**

<b>County</b>	<b>Urban</b>		<b>Rural</b>	
	<b>Population</b>	<b>%</b>	<b>Population</b>	<b>%</b>
Sevier	18,726	36.7	32,317	63.3
<b>Regional Total</b>	<b>18,726</b>	<b>36.7</b>	<b>32,317</b>	<b>63.3</b>

**Table I-3**

**Distribution of Total Regional 1990 Population by Sex and Age**

Age	Total	Male	%	Female	%
0 - 4	3,114	1,634	52.5	1,480	47.5
5 - 17	9,095	4,727	52.0	4,368	48.0
18 - 44	21,075	10,298	48.9	10,777	51.1
45 - 64	11,351	5,489	48.4	5,862	51.6
65 +	6,408	2,690	42.0	3,718	58.0
<b>REGIONAL TOTAL</b>	<b>51,043</b>	<b>24,838</b>	<b>48.7</b>	<b>26,205</b>	<b>51.3</b>

*Source: 1990 Census*

**Table I-4**

**Distribution of Regional 1990 Population by Education (Age ≥ 25)**

	Number	%
Less than 9th Grade	6,944	20.4
9th-12th Grade, no diploma	5,655	16.6
High School Graduate	11,038	32.4
Some College, no degree	5,372	15.8
Associate Degree	1,380	4.1
Bachelor's Degree	2,597	7.6
Post Graduate/Professional Degree	1,085	3.2
<b>REGIONAL TOTAL</b>	<b>34,041</b>	<b>100.0</b>

*Source: 1990 Census*

Table I-5

Distribution of Region by Type of Housing and Occupancy in 1990

	Total Persons	Occupied	Owner	Rented
<b>Single Family</b>				
1, Detached	37,294	14,068	11,868	2,200
1, Attached	543	213	121	92
<b>Multi-Family</b>				
2	1,220	572	95	477
3-4	832	410	33	377
5-9	614	367	31	336
10-19	562	271	30	241
20-49	207	114	50	64
50 or more	2	1	0	1
Institutional	649	NA	NA	NA
Mobile Home/Trailer	8,528	3,245	2,431	814
Other	592	259	144	115
<b>REGIONAL TOTAL</b>	<b>51,043</b>	<b>19,520</b>	<b>14,803</b>	<b>4,717</b>

Source: 1990 Census

Note: Total Number of Households in Region 19,520 (1993 Estimate).

Table I-6

Regional Population Projections 1994 - 2003

County	Projection Year									
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Sevier	55,558	56,745	57,957	59,195	60,460	61,751	63,057	64,214	65,273	66,496
<b>Regional Total</b>	55,558	56,745	57,957	59,195	60,460	61,751	63,057	64,214	65,273	66,496

Source: University of Tennessee, Department of Sociology

Note: Regional Population 1993: 54,396

The regional demographic trends listed in Table I-6 may affect future waste generation rates and quantities. According to the population projections compiled by the University of Tennessee, Department of Sociology, Sevier County's population will increase 23.2% between 1990 and 2000. This increase is nearly identical to the increase experienced during the 1980s. Tourism has increased dramatically in Sevier County during the past ten years and will continue increase in future years. In the past, the influx of tourists to Sevier County was seasonal with greater concentrations occurring during the summer and fall months. It has been estimated that the county can have as many as 150,000 people creating waste during peak tourist seasons. This trend is changing as the county develops year-round tourist attractions. It is anticipated that the waste flow will not have as great a variance in future years.

E. ECONOMIC ACTIVITY

The following information relates to basic economic activity in Sevier County. The following Tables include data on agricultural and non-agricultural employment, employers by industry, health care facilities, local revenue sources, assessed property values, property tax revenue, local sales and sales tax revenues, and number of registered vehicles.

Table I-7

Basic Economic Information for the Region of Sevier County

County	1993 Population <sup>1</sup>	MSA County (yes/no)	Total Employment <sup>2</sup>	Total Earnings <sup>2</sup>	Per Capita Income <sup>2</sup>	% Population Below the Poverty Line
Sevier	54,586	Yes	30,311	\$697,373,000	\$13,577	13.2%
<b>Regional Total</b>	54,586		30,311	\$697,373,000	\$13,577	13.2%

Source: <sup>1</sup> University of Tennessee, Department of Sociology, November, 1992

<sup>2</sup> Bureau of Economic Analysis, U.S. Department of Commerce, 1991

**Table I-8**

**Total Non-agricultural Employment by Sector and % of Total Employment**

<b>County</b>	<b>Manufacturing</b>	<b>Construction</b>	<b>Trade</b>	<b>Finance</b>	<b>Service</b>	<b>Govt.</b>	<b>Transportation Pub. Utilities</b>
Sevier	2,611	2,116	9,610	2,375	8,834	2,622	662
<b>Regional Total</b>	<b>2,611</b>	<b>2,116</b>	<b>9,610</b>	<b>2,375</b>	<b>8,834</b>	<b>2,622</b>	<b>662</b>
<b>%</b>	<b>9.0</b>	<b>7.3</b>	<b>33.1</b>	<b>8.2</b>	<b>30.5</b>	<b>9.0</b>	<b>2.3</b>

*Source: Bureau of Economic Analysis, U.S. Department of Commerce, 1991*

Note: Number of people in non-agricultural employment in 1991: 28,991

**Table I-9**

**Agricultural Employees**

<b>County</b>	<b>Employment</b>
Sevier	1,320
<b>Regional Total</b>	<b>1,320</b>

Table I-10

## Employers by Industry in the Region of Sevier County

FIRMS BY EMPLOYMENT SIZE CLASS										
Industry	All Firms	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000+
Total	1,768	1066	350	171	125	33	18	3	2	
Ag. Services, Forestry, Fisheries	13	8	5							
Mining	1			1						
Construction	149	104	31	9	3	1		1		
Manufacturing	72	30	12	9	8	6	4	1	2	
Transportation, Communication, Utilities	32	23	5	3	1					
Wholesale Trade	41	22	11	5	3					
Retail Trade	643	335	160	69	59	15	5			
Finance, Insurance, Real Estate	116	74	20	8	8	4	2			
Services	582	362	99	63	43	7	7	1		

Source: U.S. Department of Commerce, *County Business Patterns, 1990, Tennessee*  
Includes both private and public entities in 1990.

Table I-11

Regional Summary of Institutions Housing More than 100 Persons

County	Total Number of Institutions	Total Number of Students Prisoners/Residents	Estimated Quantity of Waste Generated*
Sevier	1	101	92 tons
<b>Regional Total</b>	<b>1</b>	<b>101</b>	<b>92 tons</b>

\* Estimated from Waste Management, Inc. (5 lbs./person/day)

Table I-12

Summary Data on Major Health Care Facilities (larger than 50 beds) (hospitals, nursing homes) in the Region of Sevier County

County	No. of Facilities	No. of Beds	Infectious Waste Management		Est. Quantity of Solid Waste Generated*
			On Site/Offsite	Type Treatment	
Sevier	4	392	offsite	incineration	517 tpy
<b>Regional Total</b>	<b>4</b>	<b>392</b>	<b>offsite</b>	<b>incineration</b>	<b>517 tpy</b>

\* Estimates from Waste Management, Inc. (16 lbs./person/day for hospitals, and 5 lbs./person/day for nursing homes)

Table I-13

Sources of Local Revenue Utilized in the Region of Sevier County

County	Property Tax	Local Sales Tax	Wheel Tax	Local Waste Collection Fee	User Fee/ Tipping Fee	Other
Sevier	X	X			X	Hotel-Motel Taxes
<b>Regional Total</b>	<b>X</b>	<b>X</b>			<b>X</b>	<b>see above</b>

Table I-14

Summary of Assessed Property Values, Property Tax Revenue, Local Sales and Sales Tax Revenues, and Number of Registered Vehicles

County	1992 Total Assessed Property Value	1992 Total Property Tax Revenue	1992 Total Sales Subject to Local Sales Tax <sup>1</sup>	1992 Total Local Sales Tax Revenue	1992 # Registered Vehicles	1992 Total Wheel Tax Revenue
Sevier	\$885,337,119	\$11,155,248	\$923,672,410	\$20,555,188	39,000	-0-
<b>Regional Total</b>	\$885,337,119	\$11,155,248	\$923,672,410	\$20,555,188	39,000	-0-

Source: <sup>1</sup> According to Matt Ballard, Assistant County Executive, Sevier County

Sevier County has experienced dramatic increases in retail, service, and manufacturing establishments during the past decade. This trend is expected to continue. Because of the increases in economic trends, Sevier County witnessed a doubling in the waste tonnage entering the landfill during the 1980s. With the continuation of this trend, Sevier Solid Waste has already developed a plan to handle this anticipated increase in the wastestream.

## CHAPTER II.

### ANALYSIS OF THE CURRENT SOLID WASTE MANAGEMENT SYSTEM FOR THE REGION

With a few exceptions, data supporting this chapter is displayed in the Sevier County Profile, prepared for the County as a part of the District Needs Assessments (Chapters III, V, VI, VII, VIII, and IX).

#### A. WASTE STREAM CHARACTERIZATION

In 1990, a detailed study of Sevier County's wastestream was developed by the State Local Planning Office. These percentages will be utilized in this plan.

Table II-1

Quantity of Solid Waste Received for Disposal/Incineration in Calendar 1991

Sevier County	Tons Disposed	Population (1991)	Waste Disposed Per Capita
Regional Total	55,000	52,144	1.05

Table II-2

Origin of Regional Solid Waste in 1991  
TONS PER YEAR

Sevier County	Residential	Institutional/ Commercial	Non-Hazardous Industrial	Special	Other
Regional Total	13,750	31,185	5,500	4,565	---

Table II-3

Acceptance of Certain Categories of Solid Waste for Disposal or Incineration

Sevier County Landfill Class 1	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
Regional Total	N		Y	4,565	Y	7,150	Y	6.8	Y	50

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

Table II-4

Description of the Waste Stream By Materials

<u>Waste Category</u>	<u>Sevier %</u>	<u>Calculated Regional Tons</u>
Paper & paperboard	45.0	24,750
Glass	6.1	3,355
Ferrous Metals	6.9	3,795
Aluminum	1.2	660
Other Non-Ferrous Metals	0.6	330
Plastics	6.5	3,575
Rubber & Leather	2.5	1,375
Textiles	1.8	990
Wood	7.5	4,125
Food Waste	9.0	4,950
Yard Waste	2.8	1,540
Misc. Inorganic Waste	1.8	990
Other (Sewage Sludge & Grease)	<u>8.3</u>	<u>4,565</u>
<b>TOTAL MUNICIPAL SOLID WASTE</b>	<b>100.0</b>	<b>55,000</b>

With an economy dependent upon tourism, Sevier County has a substantially higher percentage of paper, sewage sludge, and food waste than the national averages. In addition, approximately 13% of the county's wastestream is demolition which is currently diverted to a Class IV landfill.

Table II-5

Unmanaged Waste\*

Sevier County	Potential Waste Generation 1991 tpy	Actual Waste Disposed 1991 tpy	Unmanaged Waste 1991 (potential/actual) tpy	Percent of Potential Total
Regional Total	57,098	55,000	2,098	3.6

\* Wastes that are "outside" the collection system such as materials in roadside dumps, litter, etc.

In 1990, a wastestream composition study was completed by the Tennessee Local Planning Office. The results of this study indicated that Sevier County has a higher percentage of corrugated paper, food waste, and sewage sludge than the national averages. On the other hand, yard waste is substantially less than these averages.

Tourism has had a substantial impact on the amount and composition of solid waste in Sevier County. It is estimated that as many as 150,000 people can be creating waste on a given day during peak tourist season. Sevier County ranks third behind Davidson and Shelby counties in travel generated expenditures, travel generated payroll, travel generated employment, state tax receipts, and local tax receipts. With the continued development of commercial establishments (motels, restaurants, music theatres, etc.), tourism will continue to grow and impact the county's wastestream.

**B. WASTE COLLECTION AND TRANSPORTATION SYSTEMS**

The existing collection services and facilities in the planning region of Sevier County (County Profile of the District Needs Assessment, Chapter V, A.1-18.) are provided by both the County and the Cities of Sevierville, Pigeon Forge, and Gatlinburg. The cities offer door-to-door collection to its residents, and the County offers solid waste collection services through a network of 11 convenience center sites. All households in Sevier County have available collection service.

All solid waste collected in Sevier County is brought to the composting plant scales that are operated by Sevier Solid Waste. Demolition waste is collected separately by the cities and county and is disposed of in the Class IV landfill. All other waste is emptied on the tipping floor of the composting plant.

The City of Gatlinburg has begun construction of a transfer station that will combine the loads of its collection vehicles and lower the cost of transporting waste to the disposal facilities. This facility will even out the day-to-day fluctuations in the waste coming to Sevier Solid Waste's composting plant.

From the information gathered in the Needs Assessment, the existing collection system services all residents in the Region. A regional map indicating the location of all facilities and service areas can be viewed on page II-11. The map illustrates the location of the existing 11 County owned and operated convenience centers and the service area of the door-to-door collection system for the cities.

## C. SOURCE REDUCTION AND RECYCLING SYSTEMS

In 1990, Sevier Solid Waste developed a comprehensive solid waste plan. With the completion of the facilities recommended in the plan, the region of Sevier County has realized a 70.2 percent recycling/reduction rate in 1993. These facilities include a composting plant for sewage sludge and MSW, a Class IV landfill for demolition waste, a recycling warehouse for corrugated paper recycling, and drop-off centers for recycling of plastic, aluminum, newspaper, and motor oil.

All municipal solid waste, sewage sludge, and restaurant grease in Sevier County is brought to the composting plant for processing. The organic fraction of the wastestream (paper, sewage sludge, grease, and food waste) is broken down into compost. Ferrous metals are separated magnetically from the residuals and sent to Southern Alloy for recycling. During 1994, an aluminum separation system will be added to the plant facilities. The remaining residuals to be landfilled consist mainly of plastics.

In 1992, Sevier Solid Waste began operating a Class IV demolition landfill for the 12-15 percent of the wastestream consisting of these materials. At this site, metal items (including white goods) are placed in a roll-off container and sent to Morristown Shredders for recycling. All pallets are stockpiled and given to Newport Pallet to be reused. Other wood waste, including yardwaste, is shredded into mulch by a tub grinder and given away to local residents. Tires are shredded by the state's tire shredder and stockpiled for future market development.

In June, 1993, Sevier Solid Waste began a source separated corrugated paper recycling program. Paper is collected from businesses utilizing a side loader and brought to the 12,000 square foot warehouse. At the warehouse, the paper is baled and shipped to Rock Tenn Paper Company in Chattanooga.

In addition, Sevier Solid Waste provides drop-off containers for local residents to deposit aluminum, plastic, and newspaper. Waste Management provides collection service for these items to be recycled. Waste motor oil collection is also provided by Industrial Oil Co. of Knoxville at locations throughout the county.

A regional map indicating the location of all recycling and reduction programs and facilities can be viewed on page II-11.

**D. WASTE PROCESSING, COMPOSTING, AND WASTE-TO-ENERGY/INCINERATION SYSTEMS**

In October, 1992 the Sevier Solid Waste Composting Plant began full time operations. This plant composts the organic fraction of the wastestream. In addition, ferrous metals are pulled out and recycled at the plant. SSWI operates a recycling warehouse. Corrugated paper from local businesses is collected, baled, and shipped to the Rock Tenn paper mill in Chattanooga. Wood waste brought to the demolition landfill is processed in a tub grinder and is given to local residents as mulch.

**Table II-6**

**Operating Composting Facilities in the Region**

County	Facility Location	Tons of Waste Processed/ Yr	Composted Materials		
			Yard Waste	Sewage Sludge	Solid Waste
Sevier	1855 Ridge Rd Sevierville	54,000	No	8,000	46,000

**E. DISPOSAL FACILITIES - LANDFILLS AND BALEFILLS**

Since the completion of the Needs Assessment, Sevier Solid Waste has permitted and begun disposal of waste in Phase IV. This landfill provides enough disposal capacity to last well beyond the ten year period in this plan. Tables II-6 through II-9 present specific data on the landfill capacity available to Sevier County.

**Table II-7**

**Existing Municipal Solid Waste Landfills in the Region**

Sevier County	Name of Landfill	Location	Permitted Capacity (Acres)	Current Rate of Waste Accepted (tons/day)	Remaining Capacity (tons)
Regional Total	Sevier County Sanitary Landfill	1855 Ridge Rd. Sevierville	30	60	600,000

**Table II-8**

**Existing Landfills Expected to Close Before 2003**

Sevier County	Location	Current Use (Tons/Day)	Current Annual Use (Tons/Year)	Anticipated Date of Closure
Regional Total	NONE			

**Table II-9**

**Total Existing and Planned Capacity in the Region of Sevier County at the Close of the Next Ten Years**

Year	TONS		
	Existing	Planned	Total
FY 1993	600,000	---	600,000
FY 1994	580,000	---	580,000
FY 1995	560,000	---	560,000
FY 1996	540,000	0	540,000
FY 1997	520,000	0	520,000
FY 1998	500,000	0	500,000
FY 1999	480,000	0	480,000
FY 2000	460,000	0	460,000
FY 2001	440,000	0	440,000
FY 2002	420,000	0	420,000
FY 2003	400,000	0	400,000

**Total Capacity 600,000**

The location of all disposal facilities for the Region of Sevier County can be viewed on the regional map on the page II-11.

**F. COSTS AND REVENUES FOR THE CURRENT SYSTEM**

The following Tables indicate the current system costs and revenues for Sevier Solid Waste for disposal of waste in Sevier County. Collection of waste is the responsibility of the county and each city and is shown on a separate table. Each city and the county has developed a separate solid waste fund that is funded by solid waste fees and general revenue funds.

**Table II-10**

**Sevier Solid Waste Disposal System Costs and Revenues for Fiscal Year 1992-93**

<b>LANDFILL</b>	645,490
<b>COMPOSTING PLANT</b>	650,000
<b>RECYCLING</b>	30,000
<b>BOND PAYMENTS</b>	380,000
<b>TOTAL</b>	1,705,490

<b>REVENUE SOURCE</b>	<b>AMOUNT</b>	<b>LOCAL GOVERNMENT %</b>
Sevier County	500,976	30.82
Gatlinburg	374,350	23.03
Sevierville	364,272	22.41
Pigeon Forge	385,892	23.74
Private Haulers	70,000	
Recycling Revenue	10,000	
<b>TOTAL</b>	1,705,490	100.00

**TABLE II-11**

**Collection Systems Costs and Revenue Sources**

<b>Government</b>	<b>FY 1993 Collection Budget</b>	<b>Source of Funds</b>
Sevier County	500,000	Solid Waste Fund Revenue from General Fund
Gatlinburg	502,118	Solid Waste Fund 55% Fees 45% General Funds
Sevierville	240,493	Solid Waste Fund 33% Fees 67% General Funds
Pigeon Forge	480,000	Solid Waste Fund Revenue from General Fund
Total	1,722,611	

## **G. PUBLIC INFORMATION AND EDUCATION PROGRAMS**

Sevier Solid Waste has developed an educational program in conjunction with the 4-H clubs to teach kids in the schools about Sevier County's solid waste system. Every fourth, fifth, and sixth grader takes part in this educational program which includes a video of the composting plant, an essay contest about composting, educational programs on reduction of solid waste, a poster contest concerning the proper disposal of used motor oil, and a tour of the composting and recycling plants by the entire fifth grade class.

In addition, SSWI has developed a scale model of the composting plant. This model tours the county in different locations (schools, libraries, welcome centers, etc.). The Anna Porter Library has developed a brochure that answers questions regarding the plant and the county's overall solid waste program. During 1993, over 4,000 individuals from all over the county have visited the composting plant.

Numerous newspaper articles have been written about the solid waste system in Sevier County. In addition, the general manager and board members have spoken to local civic groups to keep the general public informed about solid waste.

## **H. PROBLEM WASTES (See Chapter X).**

## **I. SYSTEM MAP FOR BASE YEAR (1993)**

A composite map of the regional solid waste management system is provided on the following page. The map identifies the approximate location of the following existing system components for the Region of Sevier County:

1. Convenience center sites;
2. Solid waste and recycling collection service areas;
3. Recycling drop-off collection sites;
4. Waste flow patterns for solid waste generated and disposed in the County;
5. Material processing facility site (Recycling);
6. Class I and IV landfill sites; and
7. Educational program sites.



**J. STRENGTHS AND WEAKNESSES OF EXISTING SYSTEM**

By developing a comprehensive solid waste management plan in 1990, Sevier County has already met and exceeded almost all of the requirements of the Solid Waste Management Act of 1991. During 1993, the county had a 70.2 percent recycling/reduction rate. This rate is anticipated to increase even further as additional equipment comes on line (aluminum separation system) and markets for residual materials (plastics) are developed.

Sevier Solid Waste has also permitted enough landfill area to assure the county of adequate disposal capacity well beyond the ten year planning period of this document. County-wide collection service is provided to all households and businesses by the county and cities' solid waste departments.

Although collection of used motor oil is offered at numerous drop-off centers throughout the county, Sevier Solid Waste will need to provide a secure collection site for household hazardous waste by the state mobile collection service as required by the state solid waste regulations.

## CHAPTER III

# GROWTH TRENDS, WASTE PROJECTIONS AND PRELIMINARY SYSTEM STRUCTURE

In this chapter the Region of Sevier County defined probable growth trends, and determined how much waste it will be required to manage in each year of the ten-year planning period (1994-2003). In defining the regional solid waste management demand, the Region of Sevier County carried out a regional analysis following the same methodology and reporting format used by the District Needs Assessment. Next, the regional plan states which of the possible components of an integrated waste management system is considered in the plan, how much of the waste stream might be managed by each, and how components will be evaluated.

### A. PROJECTED REGIONAL DEMAND

For the Region of Sevier County, waste projections were reviewed in the County Profile in the District Needs Assessment, Chapter IV., A(1) through (7).

The following Table, summarizes calculations of annual per capita solid waste generation rates, for the region.

Table III-1\*

Year	1989	1991	1993
Annual Tons	53,550	55,000	61,195
Population	51,000	52,144	54,396
Per Capita	1.05	1.05	1.12**

\* Methodology from Items 2, 3 and 4 in Chapter IV.A of the Needs Assessment for Sevier County Profile.

\*\* 1993 per capita was higher because of a substantial increase in wood waste due to the blizzard in March.

On the following page, the projected quantity of solid waste requiring disposal (generation) in the Region of Sevier County is summarized in each projected year, adjusted for population changes.

**Table III-2\***

**Quantity of Solid Waste Requiring Disposal (tons)**

Sevier County	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Total</b>	58,336	59,582	60,855	62,155	63,483	64,839	66,210	67,425	68,537	69,821

\* Methodology from Tables IV-1 in Needs Assessment for Sevier County Profile, as extended.

The projected quantity of solid waste requiring disposal in the Region of Sevier County is summarized for each projection year, adjusted for population growth and economic growth.

**Table III-3\***

**Quantity of Solid Waste Requiring Disposal (in tons)  
Adjusted for Population and Economic Growth**

Sevier County	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Total</b>	60,270	61,579	62,915	64,281	65,677	67,103	68,547	69,836	71,039	72,413

\* Methodology from Table IV-3 in Needs Assessment for Sevier County Profile, as extended.

The projected quantities of solid waste requiring disposal (= generation) is summarized below for each projection year, adjusted for population growth, economic growth, and source reduction, recycling, and industrial process change.

**Table III-4\***

**Quantity of Waste Requiring Disposal (in tons) Adjusted for Population Changes,  
Economic Growth, and Waste Reduction and Recycling**

Sevier County	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Total</b>	15,068	15,395	15,729	16,070	16,419	16,776	17,137	17,459	17,760	18,103

\* Methodology from Table IV-4 in Needs Assessment of Sevier County Profile, as extended.

**Note:** An estimated 75% of the annual wastestream will be reduced through composting, recycling collection programs, and diversion of demolition waste to a Class IV landfill . In 1993, the county had a diversion rate exceeding 70 percent.

**B. REGIONAL DEMAND/SUPPLY**

The region's adjusted demand is calculated--the total quantity of solid waste that will require collection, treatment and disposal in each projection year from 1994 through 2003. The quantity of waste displayed in Table III-5 below represents the quantity of waste to be managed in each projection year.

**Table III-5**

**Annual Projections of Solid Waste Requiring Disposal Adjusted for All Applicable Factors (in tons/year)**

Sevier County	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Total</b>	15,068	15,395	15,729	16,070	16,419	16,776	17,137	17,459	17,760	18,103

This projected amount of waste represents the regional demand for solid waste management services, facilities and programs. This demand is compared with the current system supply and planned additions to the current system (as described in Chapter II) to define the regional needs in each projection year as illustrated in Table III-6 below.

**Table III-6**

**Projected Demand and Supply, and Identification of Potential Shortfalls or Surplus in Disposal Capacity (in tons/year)**

Year	DEMAND: Tons of Waste Requiring Disposal	SUPPLY: Existing & Planned Capacity	Surplus (+)	Shortfall (-)
1994	15,068	600,000	584,932	
1995	15,395	584,932	569,537	
1996	15,729	569,537	553,808	
1997	16,070	553,808	537,738	
1998	16,419	537,738	521,319	
1999	16,776	521,319	504,543	
2000	17,137	504,543	487,406	
2001	17,459	487,406	469,947	
2002	17,760	469,947	452,187	
2003	18,103	452,187	434,084	

**C. PRELIMINARY SYSTEM DESIGN**

The elements of an integrated waste management system that have been developed in the Region of Sevier County include waste reduction (Class IV demolition landfill with a tub grinder), recycling and landfilling. The percentages of the total projected quantity of waste to be handled by each major component by 1995 is estimated in the Table below.

**Table III-7  
Existing System Design**

<b>System Component</b>	<b>Tons of Total Waste Stream Managed in Current System (1993)</b>	<b>% of Total Waste Stream Managed in System (1993)</b>	<b>% of Total Waste Stream Managed in System (by 1995)</b>
<b>Waste Reduction:</b> Class IV demolition landfill	8,207	14	14
<b>Recycling:</b> Composting Sorting or Separate Collection	33,172 533	55 1	56 5
<b>Landfilling</b>	19,283	30	25
<b>Total</b>	<b>61,195</b>	<b>100</b>	<b>100</b>

From Table III-7, it is obvious that Sevier Solid Waste has already far-exceeded the state requirements for waste reduction by implementing the recommendations that were developed in the 1990 Sevier County Solid Waste Plan. A 75 percent reduction by 1994-95 is anticipated with the additional recycling of ferrous metals and aluminum at the composting plant.

The residuals that are currently being landfilled consist largely of mixed plastics. Several potential markets for this material are currently being studied with the possibility of sorting and recycling this material into other items or utilizing this material as a source of fuel for a local industry.



**C. HOW THE REGION WILL MEET THE STATEWIDE WASTE REDUCTION GOAL**

As indicated in Chapter III for the preliminary system design, the Region has already far-exceeded the state's 25% per capita by 1995 reduction goal. In 1993, over 70 percent of the wastestream was reduced by composting sewage sludge and the organic fraction of MSW, sending demolition waste to a Class IV landfill, grinding wood waste for mulch, and recycling ferrous metals, plastic, aluminum, news and corrugated paper. The addition of an aluminum separator at the composting plant and an increase in the ferrous metals separated at the plant will allow Sevier Sevier Solid Waste to reduce over three times the amount required by the state by 1995.

Table IV-2, on the next page, reveals how Sevier Solid Waste has accomplished this reduction in 1993 and gives a breakdown of waste reduction in the county for the ten year planning period. Currently, there are ongoing discussions with several companies that may be capable of utilizing the residual materials from the composting plant. If this material, which consists almost entirely of plastics, can be recycled then the planning region may obtain a reduction rate very close to 100 percent.

Y = Reduction Program

A description of the combination of strategies (recycling and waste reduction) to be used to meet the target amount is provided in Table IV-2 below.

**TABLE IV-2**  
Estimated Quantities of Waste Removed or Diverted From the Waste Stream (tons)

Year	Previous Reductions	Recovered & Recycled	Diverted to Class IV Landfill	Economic Incentives	MSW Composting	Total
1985 to 1989						
1990						
1991						
1992		110				110
1993		533	8,207		33,172	41,912
1994		3,014	8,438		33,751	45,203
1995		3,078	8,621		34,484	46,183
Subtotal		6,735	25,266		101,407	133,408
1996		3,146	8,808		35,232	47,186
1997		3,214	8,999		35,997	48,210
1998		3,284	9,195		36,779	49,258
1999		3,355	9,394		37,578	50,327
2000		3,427	9,597		38,386	51,410
2001		3,492	9,777		39,108	52,377
2002		3,552	9,945		39,782	53,279
2003		3,621	10,138		40,551	54,310
<b>TOTAL</b>		<b>33,826</b>	<b>101,119</b>		<b>404,820</b>	<b>539,765</b>

**D. 10-YEAR STAFFING REQUIREMENTS, BUDGET, AND FUNDING PLAN**

See Chapter XI.

**Financing Plan:**

The Region's financing for capital and operating costs has included appropriations from the tipping fee (\$30/ton for 1993) and a nine million dollar bond issue in 1991 to develop the facilities. Financing for the waste reduction program will be addressed in greater detail in Chapter XI.

**E. 10-YEAR IMPLEMENTATION SCHEDULE FOR ALL WASTE REDUCTION STRATEGIES**

The solid waste plan for Sevier County has already been implemented.

**F. RESPONSIBILITY FOR IMPLEMENTING THE PLAN**

Sevier Solid Waste, Inc. was responsible for the implementation of the solid waste plan. The combining of the cities of Sevierville, Pigeon Forge, and Gatlinburg, and Sevier County into a separate solid waste authority in 1988 allowed the county to develop a comprehensive solid waste plan years ahead of the state's timetable.

**G. REGIONAL DATA COLLECTION / ANNUAL PROGRESS REPORTS**

As per, T.C.A. Sections 68-211-863(b), the Region of Sevier County must report to the State Planning Office annually the quantities and types of recyclable materials collected. Sevier Solid Waste has a computerized scale that allows easy and accurate reporting of quantities and types of recyclables collected in the Region. Annual progress reports, utilizing information gathered in Tables IV-2 will be compiled by the general manager and submitted to the State Planning Office.

## WASTE COLLECTION AND TRANSPORTATION

## A. EXISTING COLLECTION SYSTEM

The existing collection system (as described in Chapter II) for the Region of Sevier County is compared below with the standards established by the Convenience Center Rule, 1200-1-7, for number, location and design of collection facilities (convenience centers) [T.C.A. 68-211-851(b)]. There are no unserved areas in the region.

The existing collection services and facilities in the planning region of Sevier County (County Profile of the District Needs Assessment, Chapter V, A. 1-18.) are provided by both the County and the Cities of Sevierville, Pigeon Forge, Gatlinburg, and Pittman Center. The cities offer door-to-door collection to its residents, and the County offers solid waste collection services through a network of convenience center sites. Each convenience center is open to the public everyday except Tuesday at the Kodak, Boyd's Creek, and Caton Chapel Centers. Operating hours are posted at each site entrance.

The number of residents served in the Region of Sevier County by the combined solid waste collection systems is listed below:

<u>Service Provider</u>	<u>Solid Waste Collection System</u>	<u>Number of Residents Served</u>
County	11 Convenience Centers	36,943
Cities	Door-to-Door Collection	14,100
	<b>Total Population Served</b>	<b>51,043</b>

Sevier County does not charge a fee to residents utilizing the convenience centers. The City of Gatlinburg recently instituted a collection fee for both residential and commercial customers and the City of Sevierville charges commercial customers for excess pick-ups. Neither city covers its cost of collection with these fees. Pigeon Forge does not charge a collection fee.

Solid waste collected by the County and Cities from residential and business locations is transported by County and City-owned collection vehicles to the Sevier Solid Waste Facilities. The Cities of Gatlinburg and Pigeon Forge utilize side-loaders, the City of Sevierville utilizes rear loaders for residential and front-end loaders for commercial collection, and the County operates four front-end loaders. Convenience centers are conveniently distributed throughout the county.

From the information gathered in the Needs Assessment, the existing collection system services all residents in the Region. A regional map indicating the location of all planned facilities and service areas can be viewed on the system map in Chapter XI. The map illustrates the location of the existing eleven (11) County owned and operated convenience centers and the service area of the door-to-door collection system for the cities.

### Number of Convenience Centers Required in Sevier County

As per Convenience Center Rule (1200-1-7), the minimum level of solid waste collection service is :

A. Household collection - A county shall be deemed to have met minimum level of service if at least 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.

The minimum number of centers shall be established as follows:

1) The service area in square miles divided by 180 square miles or;

$$592.3 \text{ square miles divided by } 180 \text{ square miles} = \underline{3.3}$$

OR;

2) The service area population divided by 12,000.

$$32,317 \text{ people in rural service area divided by } 12,000 = \underline{2.7}$$

The minimum number of convenience centers required for the Region of Sevier County is 3-4.

Presently, the County is operating a Convenience Center system in the unincorporated areas of the County. The following pages summarize an inventory of the Convenience Center sites, and their locations, according to the minimum level of compliance with the Convenience Center Rule 1200-1-7.

TABLE V-1

CONVENIENCE CENTER INVENTORY (MARCH 1994)

	1	2	3	4	5	6	7	8	9	10	11
DESIGN/OPERATION STANDARDS	Jones Cove	Wilhite	Newport Hwy	Ogle Market	Kodak	Boyd's Creek	Floyds Market	Winters School	Pigeon Forge	Caton Channel	Plumman Center
ACCESS	Fence Yes	Fence	Fence	Fence	Fence	Fence	Fence	Fence	Fence	Fence	Fence
DUST/MUD CONTROL	Gravel	Gravel	Gravel	Gravel	Gravel						
RUN-OFF CONTROL	Yes	Yes	Yes	Yes	Yes						
FIRE SAFETY	Yes	Yes	Yes	Yes	Yes						
COMMUNICATION	Yes	Yes	Yes	Yes	Yes						
PERSONNEL FACILITIES	Building	Building	Building	Building	Building						
WATER	NA	NA	NA	NA	NA						
PROCESS WATER	NA	NA	NA	NA	NA						
WASTE HANDLING	Yes	Yes	Yes	Yes	Yes						
FACILITY SUPERVISION	Yes	Yes	Yes	Yes	Yes						
SITE PERMITTED	Planned	Planned	Planned	Planned	Planned						
SPECIAL WASTE	NA	NA	NA	NA	NA						
WASTE CONTAINERS	6	6	15	13	15	15	15	12	15	8	12
RECYCLING	Newspaper Plastic Aluminum Motor Oil	Motor Oil	Motor Oil	Motor Oil	Motor Oil						

**B. REGIONAL NEEDS FOR COLLECTION SERVICE**

As previously stated, Sevier County already supplies more than adequate service to all residents. As additional areas of the county become incorporated within the various city limits, curbside collection will be provided to a larger percentage of the county's residents. Eventually, certain convenience centers may become obsolete which will reduce the number of centers that the county needs to operate.

Currently, there are three centers that could be considered for removal: Ogle's Market, Pittman Center, and Seymour. The Ogle's Market convenience center is located within the city limits of Sevierville. Pittman Center, while outside the city limits, is in an area that could be adequately serviced by private or city curbside collection and is probably receiving waste from Gatlinburg residents who want to avoid the city's collection fees. Seymour convenience center services a large residential area that could incorporate in the not too distant future. At present, many residents of this area are paying for private curbside collection.

**C. COLLECTION SYSTEM IMPLEMENTATION**

**Table V-2**

**Timetable for Collection System**

Program	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Upgrading Existing Centers	●									
Staff Training	To be	offered	by	DDC	DEC 6	Sevlun	60	211	151(6)	
Integrate Recycling Services	●									
Data Collection / Annual Reports	●									
Transfer Station Construction/Operation <i>(alternative disposal plant)</i>			●							
Purchase New Equipment	●									
Plan Updates						●				

● = when implementation begins.

Upgrading the convenience center system will continue through 1994 with the replacement of older collection vehicles.

Any solid waste collection plan will be annually updated by the Region as required by T.C.A. 68-211-814. This plan will consider the following:

- Survey of roadside dumps;
- Citizen complaints;
- Alternative systems available; and
- Volume of waste received or collected by the existing systems.

This evaluation report will be submitted to the State Planning Office on July 1, 1995 and each year thereafter.

The intent of the evaluation is to clearly determine whether the existing system is adequately providing solid waste collection and disposal service to residents of the County.

#### **D. TOTAL 10-YEAR STAFFING AND TRAINING NEEDS**

The total 10-year staffing for the regional collection and transportation system in Sevier County should include:

<u>Program</u>	<u>Number of Staff</u>
Convenience Center Operators	11 full-time
Data Collection & Plan Updates	1 full-time*

\* Data collection for plan updates and annual reports to be executed by one staff person for all planning elements.

Training for all collection and transportation staff will be provided by the Department of Environment and Conservation [T.C.A. Section 68-211-851(c)].

**E. 10-YEAR BUDGET**

A ten year budget, including both capital and annual operating costs, has been prepared below to summarize the county's cost of waste collection. These costs will be funded by the Sevier County general fund.

**Table V-3**

**Annual Capital and Operating Costs for Collection and Transportation of Sevier County Waste**

<b>YEAR</b>	<b>OPERATING COSTS</b>	<b>CAPITAL COSTS</b>	<b>TOTAL</b>
1994	500,000	110,000	610,000
1995	500,000	110,000	610,000
1996	500,000	110,000	610,000
1997	500,000	110,000	610,000
1998	525,000		525,000
1999	550,000		550,000
2000	575,000		575,000
2001	600,000	130,000	730,000
2002	600,000	130,000	730,000
2003	600,000	130,000	730,000

Capital Costs include cost of front-end loader to replace older vehicles. This will reduce maintenance costs and keep overall operating costs down.

Future operating costs can be lowered by closing the convenience centers on Sundays and eliminating specific centers, as previously recommended.

**F. FUNDING PLAN**

The county's financing plan for capital, operating and maintenance costs will include appropriations from the general fund. These funds will serve as the basis of Sevier County's collection and transportation system.

Detailed information describing how the Region will meet projected costs, and the sources of revenue utilized, will be discussed in Chapter XI, Section D.

**G. LOCATION OF EXISTING AND PLANNED COLLECTION SYSTEM**

The approximate location of the existing and new elements of the regional collection and transportation system in Sevier County is available on the system map provided in Chapter XI. Arrows are used to indicate probable waste flow patterns within the region.

**CHAPTER VI**  
**RECYCLING**

**A. REGIONAL NEEDS FOR RECYCLING PROGRAMS, FACILITIES, AND SERVICES**

As previously stated in Chapter III, the Region of Sevier County has already surpassed the state requirements for waste reduction. In addition to the composting facility which provides the majority of the county's 70 percent plus reduction rate, Sevier Solid Waste provides the following recycling programs:

- 1) six drop-off centers for aluminum, plastic, and newspaper,
- 2) fifteen drop-off containers for used motor oil,
- 3) magnetic removal of ferrous metals at the composting facility,
- 4) separate collection and baling of corrugated paper from local businesses,
- 5) separate collection of metals at the demolition landfill,
- 6) mulching of wood waste at the demolition landfill, and
- 7) a wood pallet exchange program.

Future additions to the recycling program include an aluminum separation system in the composting plant and the removal of the mixed plastic wastestream to be utilized at a nearby industry as a fuel source. These programs could make Sevier Solid Waste's reduction rate exceed 90 percent.

**B. EXPANSION AND ENHANCEMENT OF RECYCLING IN THE REGION**

The addition of the aluminum separation system in the composting plant will enhance the current recycling program during 1994. As seen in Table VI-1, ferrous metals and the corrugated paper recycling program should increase during 1994 due to having a full year's operation.

**Table VI-1**

**Current Recycling Program in Sevier County**

Item Recycled	Method	1993 Tonnage	% of Total Wastestream	1994 Estimated % of Total Waste
Alum, Plastic, News	Drop-off Centers	115	.2	.2
Corrugated Paper	Source Separated	174	.3	.6
Ferrous Metals	Magnetic Separation	259	.4	2.6
			.9	

Each drop-off center has a roll-off compartmentalized container for newspaper, plastic containers and aluminum cans. These containers are collected by Waste Management and delivered to the Tidi-Waste recycling facility in Morristown. Industrial Oil Service of Knoxville supplies the waste motor oil containers and provides collection services. A map of the drop-off collection sites is provided on the system map in Chapter XI.

Sevier Solid Waste operates the corrugated paper recycling warehouse. Seperate containers are located behind businesses throughout the county. Twice weekly, the paper is collected, brought to the warehouse, and baled to be shipped in truckload quantities to Rock Tenn Paper Company. The location of the Center is also provided on the system map in Chapter XI.

Ferrous metals collected at the demolition site are shipped to Morristown Shredders. All metals magnetically-seperated at the composting plant are shipped to Southern Alloy in Rockwood. All recyclables are weighed on the computer scales operated by Sevier Solid Waste. Reports of the quantities and types of recyclable materials collected are produced monthly. The Region will make this information available to the State Planning Office, as well as, to the Office of Cooperative Marketing for Recyclables.

The Region will participate in creating and expanding markets for recovered materials or products with a recycled content through local government purchasing and procurement policies, or by providing economic incentives for new businesses who manufacture new products from recovered materials. As local businesses increase their waste reduction efforts in Sevier County, the Region will initiate a waste exchange program for recovered materials from the commercial and industrial sector.

In order to educate children and adults about source reduction and recycling, Sevier Solid Waste has developed an educational program in conjunction with the local 4-H club program that teaches children in the 4-6 grades. This program includes a walking tour video of the composting and recycling plant, an essay contest on composting and its' implications for Sevier County, and a tour of the solid waste facilities. In 1993, a scale model of the composting plant was constructed. This model is moved to various locations throughout the county to give local residents an opportunity to learn about the plant. Additional information concerning the educational programs in Sevier County is located in Chapter IX.

#### **C. TOTAL 10-YEAR STAFFING AND TRAINING NEEDS**

The total 10-year staffing for the regional recycling program in Sevier County has already been provided by Sevier Solid Waste. No additional personnel are anticipated to be needed for the future expansion of the aluminum and plastic recycling programs as previously mentioned. Data collection for plan updates and annual reports will be developed by the general manager for all planning elements.

#### **D. 10-YEAR BUDGET**

Since the composting plant is an integral part of recycling in Sevier County, the ten year budget is provided in Chapter VII.

**E. IMPLEMENTATION SCHEDULE**

**Table VI-2**

**Timetable for Recycling Program in the Region of Sevier County**

<b>Program</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Develop Aluminum Separation System and Mixed Plastic Recycling	●									
Data Collection / Reports and Milestones Annually	●									
Purchase New Equipment	●									
Plan Updates						●				

● = when implementation begins.

Annual milestones will be reported on the progress of the recycling program. From information gathered in Table IV-2 annually, and on the form provided by the Division of Solid Waste Assistance entitled, Quarterly Inventory of Recycling Operations, progress of the recycling program can be adequately measured. As per, T.C.A. Section 68-211-863(b), the Region will submit information gathered from these documents annually to the State Planning Office.

**F. FUNDING PLAN**

The Region's continuing financing plan for capital, operating and maintenance costs will include a combination of revenue sources including grant monies, a portion of the tipping fee, and sales from the recyclable materials marketed. Detailed information describing how the Region will meet the projected costs and sources of revenues utilized will be discussed in Chapter XI, Section D.

**G. LOCATION OF EXISTING AND PLANNED REGIONAL RECYCLING INFRASTRUCTURE**

The approximate location of the existing and new elements of the regional recycling program is provided on the composite map in Chapter XI.

**COMPOSTING, SOLID WASTE PROCESSING,  
WASTE-TO-ENERGY AND INCINERATION CAPACITY****A. EXISTING REGIONAL COMPOSTING, WASTE PROCESSING AND/OR INCINERATION**

As previously stated in this report, Sevier Solid Waste has an MSW and sewage sludge composting plant and waste processing facilities in operation that are reducing the waste flow to the landfill by more than 70 percent. Both the composting plant and waste processing facilities are funded by local tipping fees. A ten year operating and maintenance budget for these facilities is in Chapter XI of this plan. The following is a description of each of these facilities.

**Composting Plant**

In September, 1992, Bedminster Bioconversion began operating a co-composting facility that processes over 150 tons of MSW and 30 tons of sewage sludge per day. Sevier Solid Waste financed the construction of this facility with tax-free bonds.

All MSW and sewage sludge in Sevier County, after being weighed, is unloaded onto the tipping floor. Here, oversized items such as tires, furniture, carpeting, etc. are removed and placed into the residual trailer. A front end loader pushes the remaining waste into the loading hoppers where a ram moves this material into the first compartment of the three digesters. Each digester has three compartments (one for each day of retention time) and is 12 feet in diameter and 185 feet in length.

Temperatures in the digesters reach as high as 150 degrees Fahrenheit which provides pathogen kill and accelerates the decomposition process. This is natural heat that is discharged by the microbes during the composting process. After three days, the material is discharged and screened. Remaining residuals pass under a magnet that pulls out ferrous metals. These metals are sent to Southern Alloy in Rockwood for recycling. All other inorganic materials which consist largely of plastics fall into the residual trailer and are transported to the landfill. Of the original municipal solid waste, approximately 30 percent is sent to the landfill.

It is anticipated that during 1994, an aluminum separation system will be installed in the plant. This system should provide an additional 2-4 percent reduction in the amount of waste being landfilled. In addition, discussions are ongoing with several companies that are interested in the mixed plastic waste.

The three day old "rough compost" that has fallen through the screen is placed on the aeration floor where it is monitored and turned. Exhaust air from the composting process is pulled out of the building through a large biofilter system. After approximately six weeks, the material is processed through a final screening and is ready for distribution. Local markets for the compost include farms, landscapers, soil mixing companies, golf courses, and individual vegetable and flower gardens. All compost produced by the plant has been distributed. Sales of compost have been minimal so far, but are estimated to be \$100,000 per year by 1995.

Operation and maintenance of the composting plant is the responsibility of Bedminster Bioconversion as a part of a five year contract with Sevier Solid Waste. The thirteen employees at the plant were trained by Bedminster.

During the first quarter (Jan-March) of 1994, of the 12,483 tons of materials deposited on the tipping floor of the plant 8,422 tons or 67.5% was organic matter that was composted. In addition, 210 tons (1.7%) of ferrous metals were separated and recycled.

### Processing Facilities

Sevier Solid Waste maintains several different types of processing facilities including: a recycling warehouse, a tub grinder, and a metal storage bin.

The recycling warehouse is a 12,000 square foot building that was completed in 1993. Containers have been placed behind over forty businesses in Sevier County for separate collection of corrugated paper. Twice weekly, a 25 cubic yard side loader collects the paper and brings it to the warehouse. At the warehouse, the paper is baled in 1,500 pound bales and truckload quantities (20 tons) are shipped to Rock Tenn Paper Company in Chattanooga for recycling. Two SSWI employees operate this facility on a part time basis.

The paper is sold to Rock Tenn under a long term contract at seven dollars over high side southeast yellow sheet. At current prices of \$47 per ton, each truckload of paper is worth over 1,000 dollars. Revenues from this operation should exceed \$20,000 during 1994 which is equal to the cost of operating the program. During the first quarter of 1994, 46 tons of corrugated paper were processed and recycled representing .3% of the total wastestream during this period.

At the Class IV demolition landfill, a ten foot Olathe tub grinder is utilized to grind wood waste into mulch. The mulch is given to local residents free of charge. It is estimated that ten percent of the demolition waste is wood material that is mulched. Large metal items, such as white goods and sheet metal, are separated and placed in a roll-off container to be sent to Morristown Shredders for recycling. During the first quarter of 1994, 42 tons or 1.5% of the 2,752 tons of demolition waste was metal that was recycled.

The demolition site has one full time operator. Operation of the tub grinder requires the assistance of one additional man for one day each week.

**A. COMPARISON OF EXISTING DISPOSAL CAPACITY WITH PLANNED SUPPLY**

As shown in Table VIII-1, Sevier Solid Waste's existing Class I landfill has ample excess capacity due to the existing comprehensive solid waste management program in Sevier County that was developed in 1990. The formation of Sevier Solid Waste, Inc. in 1988 assures protection of this regional capacity for solid waste disposal.

If there is an unforeseen increase in waste generation, the region will initiate planning for expanded capacity within five years of the completion of the existing site.

The location of the existing Class I solid waste landfill is shown on the regional system map in Chapter XI.

Table VIII-1

Projected Demand and Supply, and Identification of Potential Shortfalls or Surplus in Disposal Capacity

Tons Per Year

County: Sevier

Year	DEMAND: Tons of Waste Requiring Disposal	SUPPLY: Existing & Planned Capacity	Surplus (+)	Shortfall (-)
1993	19,283	619,283	600,000	
1994	15,068	600,000	584,932	
1995	15,395	584,932	569,537	
1996	15,729	569,537	553,808	
1997	16,070	553,808	537,738	
1998	16,419	537,738	521,319	
1999	16,776	521,319	504,543	
2000	17,137	504,543	487,406	
2001	17,459	487,406	469,947	
2002	17,760	469,947	452,187	
2003	18,103	452,187	434,084	

As previously described, a public education and information program to support the solid waste management plan has already been implemented. The methods utilized in this program include: school-based instruction, slide and video presentations to local civic groups, publication of information in the local papers, displaying the plant scale model, and the development of a speaker's bureau.

### **School Educational Program**

During the 1992-93 school year a solid waste educational program was developed and taught to 4-H members in grades 4 through 12 in 14 Sevier County schools. Every student in the fourth through sixth grade is a member of 4-H; in higher grades membership is optional. This program was developed jointly between Sevier Solid Waste and the local 4-H organization to educate students and the general public about Sevier County's solid waste program.

During August, in-service training is provided for teachers to give them an overview of the program for the upcoming year. In October, environmental educational packets are distributed to students. The video "The Rotten Truth" from the Children's Television Network is shown and discussed by the students. This film explores various options for dealing with solid waste and looks at the pros and cons of each without taking sides. In November, over 1,000 students participate in a public speaking contest to exhibit what they have learned from the movie and the information discussed.

In 1992, a video was made that presents a walking tour of the composting plant and landfill. In January, this video is shown and discussed with the students. In addition, students participate in a poster contest concerning environmental issues. In February, over 2,000 4-H'ers participate in an educational program about the need and proper way to recycle used motor oil. Flyers are distributed to each student listing the location of oil recycling containers throughout the county.

In March, 4-H has a recycling Saturday. This event is promoted in the local newspaper and over 750 Sevier County residents participate by bringing in aluminum, motor oil, plastic, newspaper, and glass to be recycled.

As a culmination to the program during May, every fifth grader in the county tours the composting plant and recycling warehouse. This program has been very beneficial in developing a better understanding of the local solid waste program.

### **Other Educational Programs**

Every local civic organization (Kiwanis, Rotary, Lions, etc.) has seen the slide show presentation of the solid waste program developed by the general manager of Sevier Solid Waste. In 1993, a speaker's bureau was developed by the Anna Porter Library in Gatlinburg to assist local organizations in obtaining speaker's for

their meetings. In addition, the local paper has carried numerous articles relating to the development and implementation of the solid waste program.

In 1993, a scale model of the composting plant was constructed along with a small booklet entitled "A Citizens Guide to the Sevier County Composting Plant". The scale model is displayed in various locations (schools, post office, welcome centers, etc.) throughout the county and the booklet is distributed free to local citizens. Both of these items explain the solid waste program that Sevier Solid Waste has developed.

All of these educational items were established without any additional staff or budget requirements.

The Solid Waste Management Act directly addresses four problem wastes. The Region of Sevier County, in its plan, must describe how the regional programs will interface with the state household hazardous waste collection service. The Act also bans disposal of scrap tires, batteries and waste oil in landfills after January 1, 1995, and requires the County to develop an infrastructure for accepting, storing, recycling or safe disposal of these materials by the end of 1994. The regional plan addresses these requirements.

The Act does not address litter prevention/education/remedial action programs. However, the community efforts funded by the litter grants are acknowledged, evaluated, and incorporated into the regional plan.

No data on current handling of waste tires, used oil or lead acid batteries was collected in the District Needs Assessment. The Act bans these materials from landfills or incinerators by the end of 1994, and requires the County to provide a site to receive and store them for ultimate recycling and disposal. The regional plan describes how the Region will collect necessary data to locate, design and open these collection sites by the statutory deadline. Specific information included for each problem waste is provided in the pages that follow. A more detailed plan will be required when the regional plan is updated in 5 years.

#### A. HOUSEHOLD HAZARDOUS WASTE (HHW)

##### Regional Needs for a HHW Management Program

- 1) Identify an appropriate temporary site for collection,
- 2) Promote the collection event through advertisement and education; and,
- 3) Provide a County site representative during Collection Event.

Several potential temporary locations have been identified by the County for the collection, sorting and packaging of HHW. Given the minimum requirements of a temporary site required by the Tennessee Department of Environment and Conservation, as cited in the Policy Guide on County Responsibilities for the Tennessee HHW Collection Program, 1993, the most appropriate location in Sevier County is the Class IV demolition landfill. This site already has personnel available that could be utilized to assist the state collection service.

The County will have a site location identified when submitting a request in writing to the State for the collection service. The request will identify any of the site criteria that are impossible for the County to meet. 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 nonhazardous wastes.

The County will advertise in the local newspapers the date, hours and location of the Collection Event. The advertisement will be published at least two full weeks preceding the event date and during the week of the event. The ad will specify that only 110 pounds of waste will be accepted from each household during the event and list the items excluded from the program, as well as examples of acceptable items. The ad will indicate that the

collection and disposal costs will be paid by the State of Tennessee.

The County will provide educational materials and brochures concerning HHW collection and disposal to the public. Educational materials provided by the contractor and the State will also be made available for use by the County. In addition, the existing educational program for Sevier County will support and promote the HHW program.

A site representative will be provided by the County and available on site to represent the County during the Collection Event. The site representative will safeguard the County property used by the collection contractor (land and waste containers) and manage problems that may arise during the collection of HHW with County-owned utilities and the nonhazardous waste containers.

The site representative will be available to assist the collection contractor in the event of an emergency. Telephone numbers for the local law enforcement, emergency response, and nearest medical facilities and the address of the medical facilities will be provided to the collection contractor. The site representative will be responsible for notifying the proper authorities if necessary.

Provided below is an estimate of the program costs to the County for a HHW collection program.

#### HOUSEHOLD HAZARDOUS WASTE COLLECTION

<u>PROGRAM ELEMENTS</u>	<u>PROGRAM COSTS</u>
Site (containers)	Leasing \$150 (service solid waste containers)
Advertisement	\$200 (newspaper article, brochures)
Site Representative	<u>\$ 60</u> (\$6/hr @ 10hrs.)
<b>Total</b>	<b>\$410</b>

#### Site Criteria:

- Be accessible by paved roads
- Convenient location
- Paved working area (100 ft. X 100 ft.)
- Accommodate at least 15 cars
- Clean water source
- Toilet facilities
- Telephones
- 110 electrical outlet

Progress of the program will be reported annually to the State on the types and amounts of HHW collected and the number of people served by the program. As per, T.C.A. Section 68-211-863(b), the Region will submit these annual reports to the State Planning Office.

**B. WASTE TIRES**

The current (1993) waste tire handling and disposal practices in Sevier County already meet state guidelines with a permitted tire storage area located at the demolition landfill. The site has a maximum storage quantity of approximately 30,000 tires. During the fiscal year 92/93, 41,653 tires were sold in Sevier County (This quantity was calculated from the annual amount of the tire pre-disposal fees paid into the Solid Waste Management Fund each year. The annual revenue was obtained from the Department of Revenue, 1993). The existing storage site will be capable of handling the current discard rate. On two separate occasions in 1993, Sevier County shredded 19,330 and 8,069 tires utilizing the State Mobile Tire Shredding Program. Shredded tires are currently being stockpiled pending development of a recycling market.

The County will continue to inventory illegal tire piles and estimate the quantity of tires in each through the operations of the County litter prevention program. Currently, there are no known illegal tire dumps in the county.

Estimated operational costs on the maintenance of the storage site, vector control, and shredding operation support are integrated into the daily activities of the landfill operator already on site.

**C. WASTE OIL**

Sevier Solid Waste provides 13 locations for the disposal of used motor oil. Industrial Oil of Knoxville provides the containers and collects the oil every 4 to 6 months. During 1993, 1,800 gallons of oil was recycled in Sevier County. This program, in conjunction with existing recycling programs at local service stations, provides the county with a very thorough motor oil recycling effort.

**D. LEAD ACID BATTERIES**

Currently, lead acid batteries are being efficiently collected and recycled by local automotive service centers in the region. Sevier Solid Waste supports this effort by providing a segment on the proper disposal of batteries in its educational program.

**E. LITTER**

The County will continue to operate the litter prevention program for the collection of roadside litter and the clean-up of identified roadside dumps. The County Solid Waste Department administers the litter prevention grant with the daily pick-up of roadside litter (approximate amount of roadside litter collected is unknown).

During the fiscal year 93/94 the County must designate at least 10% of the litter prevention budget to educational efforts. Several educational methods to inform the public about littering and illegal dumping have been considered including; litter bags to be distributed to school children by the County 4-H Program and paid advertisements concerning littering behavior in local newspapers monthly.

**F. TIMETABLE FOR PROBLEM WASTE COLLECTION PROGRAM**

Provided below is a timetable to indicate the schedule of events planned with regards to problem waste collection.

**Table X-1**

**Timetable for Problem Waste Collection Program in the Region of Sevier County**

<b>Program</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Household Hazardous Waste: Identify Potential Site Location Advertisement and Education Identify Site Representative Scheduled Collection Event		●								
Oil and Battery Collection*	●									
Waste Tire Collection*										
Litter Collection*										

● = when implementation begins.

\* Waste tire, oil and litter collection programs began before 1994, and will continue throughout the ten-year planning period.

## **A. SYSTEM DEFINITION**

As previously stated, Sevier Solid Waste has already developed an integrated waste management system for the Sevier County Region. This system and the percentage handled by each component consists of: a composting plant for sewage sludge and MSW (55%), a Class IV demolition landfill (14%), a recycling system that includes a corrugated paper collection system and drop-off containers (1%), and a Class I landfill for residuals from the composting operation (30%).

On the following pages is a base map showing the components of the solid waste system in Sevier County.

## **B. IMPLEMENTATION SCHEDULE**

The elements of the solid waste plan have already been implemented.

## **C. STAFFING AND TRAINING REQUIREMENTS**

Authorized solid waste management positions in the region include general manager of Sevier Solid Waste (landfill operation, recycling, and composting plant) and four collection management positions in the county and the three cities. The general manager of SSWI has a manager of landfill operations certification from SWANA and will be required to obtain any additional certification that is required by the state.

No additional staff will be required during the ten year planning period.

## **D. BUDGET**

Each jurisdiction (Sevier County, Cities of Gatlinburg, Pigeon Forge, and Sevierville) is responsible for its percentage share of the annual operating and maintenance costs. The percentage share is set for the next fiscal year according to the percentage of waste that each jurisdiction brought to the solid waste facilities the previous year.

Capital improvements were financed by a nine million dollar bond issue in 1992.

# FACILITIES

- LEGEND**
- SCHOOL
  - CHURCH WITH CEMETERY
  - CEMETERY
  - POST OFFICE
  - POSTAL
  - TOWN HALL OR COMMUNITY CENTER
  - HIGHWAY REST STOP
  - HIGHWAY GARAGE (STATE, COUNTY)
  - AIRPORT
  - AIRPORT LIMITED FACILITIES
  - LANDING AREA OR BIPLANE
  - FRANCHISEMENT STATION
  - ORIGINATOR OF (CONDUIT TOWER)
  - COUNTY SEAT
  - OTHER OFFICE AND WILLAGE
  - POWER PLANT
  - PHONE OR TELEPHONE STATION
  - DO NOT INDICATE LOCATION OF ANY CULTURAL FEATURE OUT OF PLACE
  - INTERSTATE HIGHWAY MARKER
  - U.S. NUMBERED HIGHWAY MARKER
  - STATE HIGHWAY MARKER (TRUCKING AND PRIMARY SYSTEM)
  - STATE HIGHWAY MARKER (TRUCKING AND SECONDARY SYSTEM)
  - PROPOSED BY PLAN WITH CEMENTUM
  - LAKE WITH DAM
  - RESERVOIR POND OR LAKE
  - LEVEL OR DAM
  - DRAINAGE CANAL
  - WATERWAY STREAM
  - TRUCK STREAM
  - DAM WITH LOCK
  - HEAD OF NAVIGATION
  - NAVIGABLE STREAM
  - RAILROAD STATION
  - GRADE CROSSING
  - GRADE OVER ROAD BELOW
  - OVERHEAD ROAD ABOVE
  - RAILROAD TUNNEL
  - HIGHWAY GRADE SEPARATION (TRUCKING AND PRIMARY SYSTEM)
  - HIGHWAY GRADE OVER 20 FEET
  - TUNNEL
  - LOW WATER BRIDGE
  - FERRIS FERRY OR ROLL FERRY
  - HIGHWAY BRIDGE OVER WATER CROSSING
  - CONCRETE, STEEL, OR WOOD
  - BRIDGE OR UNIMPROVED ROAD
  - GRADE AND DRAINAGE, SOIL, GRAVEL, OR STONE
  - RAILROAD
  - RAILROAD
  - DISTANCE IN MILES BETWEEN DESIGNATED POINTS
  - FULL CONTROL OF ACCESS
  - NATIONAL PARK SERVICE HIGHWAY
  - COUNTY LINE
  - STATE LINE
  - UNINCORPORATED BOUNDARY MARKER
  - INCORPORATED CITY BOUNDARY
  - RESERVATION BOUNDARY

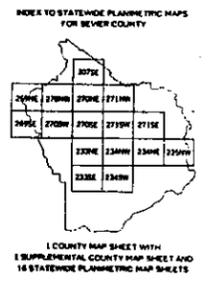
Closed  
SEVIER SOLID  
WASTE, INC.  
LANDFILLS

SEVIER SOLID  
WASTE, INC.  
MSW COMPOST  
FACILITY  
+  
Recycling  
warehouse

SEVIER SOLID  
WASTE, INC.  
LANDFILL

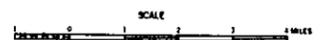
**MAP KEY**

- ▽ Permitted Class I Landfill (Municipal Solid Waste)  
1855 Ridge Rd.
- ▽ Permitted Class IV Landfill (Demolition)  
Echterview Rd.
- © Composting Facility
- Closing Landfill in March 1994



## GENERAL HIGHWAY MAP SEVIER COUNTY TENNESSEE

PREPARED BY THE  
TENNESSEE DEPARTMENT OF TRANSPORTATION  
BUREAU OF PLANNING AND DEVELOPMENT  
PLANNING DIVISION  
IN COOPERATION WITH THE  
U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION



1990

POPULATION OF SEVIER COUNTY  
41,418 (1990 CENSUS)

POLYCONIC PROJECTION

CHAPTER XII

ALLOCATION OF IMPLEMENTATION RESPONSIBILITIES:  
PLAN ADOPTION AND SUBMISSION

On the following page is a copy of the Sevier Solid Waste Board of Directors meeting whereby this plan was officially adopted.

BOARD OF DIRECTORS MEETING

JUNE 22, 1994

the local 4-H Club will sponsor the program and tentative plans are to place the collection unit at the Sevier Farmers Cooperative.

The next item of business was Approval of the Solid Waste Plan. The first six chapters of the plan were presented to the Board at the May 11 meeting and the final chapters presented June 22. The plan will be submitted to the state before June 30, 1994. Upon Motion of Jim Wagner, seconded by Earlene Teaster, the Solid Waste Plan was unanimously approved.

The next item of business was Review and Consideration of Bids for Clay Liner, Geomembrane Liner, and Collection System for Phase IV-A Landfill. Mr. deMoll reported that only one bid was received and it was from Blalock and Sons for the amount of \$443,000. Engineer Jack Flynt reported that his staff had figured the cost to open this additional space would be approximately \$450,000. Mr. Flynt recommended that the Board accept the bid from Blalock's. After a general discussion, a Motion was made by Larry Waters, seconded by Jim Wagner, to have Engineer Jack Flynt try to negotiate with Blalock's for a lower price since this was the only bid received. The Motion passed unanimously.

The next item of business was Review and Consideration of Sewage Sludge Processing. Cindy Cameron Ogle reported

### **A. FLOW CONTROL**

Since each jurisdiction in the region maintains its own collection system and has guaranteed their percentage proportion of the bond issue, adequate flow control in the region is already established without adoption of a formal flow control ordinance.

### **B. PERMIT APPLICATION REVIEW**

As stated in the charter of Sevier Solid Waste (See Appendix A), the Board of Directors has the authority to review and approve any proposed solid waste facilities in Sevier County.

During 1990-91, the Board of Directors developed and implemented a comprehensive solid waste plan. Public hearings were held by Sevier Solid Waste regarding both the plan and the new landfill location. Since the solid waste plan recommended the issuance of municipal bonds to cover the costs of development of new facilities was reviewed and unanimously approved by each city's council and planning commission and the Sevier County Commission.

## APPENDIX A

### INTERLOCAL COOPERATION AGREEMENT

This Interlocal Cooperation Agreement made and entered into this 30th day of November, 1988, by and between the CITY OF GATLINBURG, TENNESSEE (a municipal corporation); the CITY OF PIGEON FORGE, TENNESSEE (a municipal corporation); the CITY OF SEVIERVILLE, TENNESSEE (a municipal corporation) (collectively hereinafter sometimes referred to as the "Cities"); and the COUNTY OF SEVIER, TENNESSEE (a County of the State of Tennessee) (the "County") , all political bodies within Sevier County and within the State of Tennessee, pursuant to applicable state law, including but not limited to, the provisions of Tennessee Code Annotated §12-9-101 et seq, and the duly adopted resolutions of the respective parties as set forth more fully herein.

WHEREAS, the City of Gatlinburg has heretofore operated a solid waste landfill used by each of the parties hereto and said operation has a limited lifetime and it is expected that an alternative landfill or method of disposal will be needed in the near future; and

WHEREAS, the disposal of solid waste is a problem affecting each of the parties hereto and all of the citizens and residents of their respective jurisdictions and a jointly arrived at solution would be in the best interests of all concerned; and

WHEREAS, each of the parties hereto is specifically authorized by state statute and resolutions and ordinances within their respective jurisdictions to collect and dispose of solid waste in an environmentally acceptable manner and are further authorized and empowered under the laws of the State of Tennessee to finance, acquire, construct, own and operate solid waste disposal and/or energy recovery facilities or to contract therefor; and

WHEREAS, each of the parties hereto is agreeable to the joint operation of any further facility for solid

waste disposal and/or incineration and/or energy recovery facilities as determined by the Corporation to be created; and

WHEREAS, the City of Gatlinburg has duly adopted a motion at its Board of Commissioners meeting on the 8th day of November, 1988, authorizing the City of Gatlinburg to enter into this Agreement and abide by the terms and conditions set forth herein; and

WHEREAS, the City of Pigeon Forge has duly adopted a motion at its Board of Commissioners meeting on the 28th day of November, 1988, authorizing the City of Pigeon Forge to enter into this Agreement and abide by the terms and conditions set forth herein; and

WHEREAS, the City of Sevierville has duly adopted a motion at its Board of Mayor and Aldermen meeting on the 21st day of November, 1988, authorizing the City of Sevierville to enter into this Agreement and abide by the terms and conditions set forth herein; and

WHEREAS, the County of Sevier has duly adopted a motion at its Board of County Commissioners meeting on the 21st day of November, 1988, authorizing the County of Sevier to enter into this Agreement and abide by the terms and conditions set forth herein; and

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter contained, the sufficiency of which are hereby acknowledged, the Cities and County agree as follows:

1. The Cities and County which are parties to this Agreement shall take all necessary action, including adopting necessary proceedings, to cause the creation of a not-for-profit corporation under the laws of the State of Tennessee for purposes of planning, implementing, financing, owning, operating or contracting or leasing such landfills, solid

waste disposal and energy production facilities and/or other facilities for the collection, transporting, disposal and recycling of solid waste generated within the Cities and County. Each party hereto shall appoint one representative to the governing body of said corporation, each respective appointee to be confirmed by the principal legislative body of the party making such appointment, and jointly these representatives shall constitute the Board of Directors of said corporation. Each Director so appointed shall serve at the pleasure of the appointing jurisdiction and until his or her successor is appointed. Each Director shall have a voice and a vote equal to his jurisdiction's pro-rata portion of the total tonnage of solid waste generated by the parties to this Agreement. The present total useage and respective tonnage and respective percentages are found in Exhibit "A" hereto. The ratio and percentages shall be adjusted annually to reflect the weight of each Director's vote. Said adjustment shall take place as soon after June 30th of each year as records are available to make the necessary calculations. All actions of the Board of Directors shall be by two-thirds majority vote as evidenced by the respective weight of any Director's vote.

2. This Agreement shall be for an initial term of twenty-five (25) years from and after the execution hereof. The duration may be extended either at the end of the original 25 year term or prior thereto by appropriate action of the respective jurisdictions evidencing their intention to so extend the duration of this Agreement.

3. Upon execution of this Agreement, the parties hereto shall cause a not-for-profit corporation to be formed in accordance with the state statutes of the State of Tennessee. The precise organization, composition and nature

of the not-for-profit corporation are more specifically set out in the form attached hereto as Exhibit "B", being a proposed corporate charter.

4. Each party hereto shall nominate and appoint one Director to serve on the Corporate Board of Directors and each respective appointment shall be confirmed by the principal legislative body of the party making such appointment. The original Board of Directors shall be composed of the following individuals:

<u>Party to Agreement</u>	<u>Board Appointee</u>
City of Gatlinburg	Cindy M. Cameron, Acting City Manager
City of Pigeon Forge	Earlene Teaster, City Manager
City of Sevierville	Russell Treadway, City Administrator
County of Sevier	Larry Waters, County Executive

These members of the original Board of Directors shall serve until their successors are appointed, and at the pleasure of their appointing agency or so long as they hold their respective offices within the appointing agencies. Any Board member who no longer serves in his appointed or elected position shall automatically cease to serve on the Board of Directors of the Corporation upon the appointment of his or her successor. Each Board member shall exercise the same voting percentage as set forth more fully in paragraph 1 above and as shown on Exhibit "A" attached hereto.

5. Through their duly authorized and empowered officials and representatives, the parties shall consult and cooperate with each other in all respects regarding the construction, operation and maintenance of the facility so that all parties shall at all times be fully informed and in agreement with regard thereto; provided, however, that the ultimate decisions as to planning, implementation, financing, construction, operation and maintenance of any

facility contemplated hereby and as to contracts or leases with respect thereto or with respect to solid waste collection, transportation and disposal, shall be made by the not-for-profit corporation through its Board of Directors. Likewise, the corporation shall have the benefit and use of the respective staffs of the parties at no expense to the corporation, for the purpose of consultation and advice regarding the planning, construction, operation and maintenance of the facility.

6. The parties will take all necessary legally permissible action, including adopting necessary proceedings, to exercise sovereign governmental powers to exclusively control the collection and disposal of solid waste generated within their respective jurisdictions and, to contract exclusively with such not-for-profit corporation created pursuant hereto with respect to the collection, transportation and disposal of such solid waste.

7. The parties agree that to the extent permitted by law, the fees and charges for disposal of solid waste at the facility will be initially established and amended from time to time so as to produce revenues sufficient, when added to other revenues produced by the facility, to pay the costs of financing, constructing, operating and maintaining the facility and any additions, improvements or betterments thereto and to provide revenues sufficient to meet any debt service coverage requirements. The parties hereto agree to establish an initial budget for the operation of any facility in the amount of \$10,000.00. Each party shall contribute, upon the execution of this Agreement, its pro-rata portion of the total of this budgetary sum.

8. Sevier County, Tennessee hereby transfers and dedicates to the use of the Corporation the ownership and

use of the scales for the weighing of vehicles presently located on the landfill site. The County further agrees to execute any documents necessary to evidence this transfer of ownership. Sevier County further agrees that employees of the corporation may have use of so much of the existing building, presently used by Sevier County, as needed to operate the scales. The remaining parties hereto on behalf of the Corporation hereby agree to accept the ownership, operation and upkeep of these facilities from and after the transfer date.

9. All future solid waste disposal of whatever type, whether by landfill, incinerator or otherwise, for each of the parties hereto shall be exclusively handled by this Corporation. To this end and to the extent necessary to construct, acquire and finance any additional landfill or other facility, each party hereto hereby agrees that it will adopt such ordinance or resolution as required to assure that all collected and acceptable solid waste generated within its respective jurisdiction, shall be disposed of or processed by this Corporation.

10. The Corporation is hereby specifically authorized to contract with other individuals, corporations or any governmental entities for the processing and/or disposal of additional solid waste.

11. The Corporation shall have and be empowered to utilize all lawful methods of financing any acquisition or improvements or other needs of the Corporation. In addition, the Corporation may assess the parties to this Agreement prorata for such sum or sums as are needed to successfully operate its solid waste facilities and operations. In addition, the Corporation shall set reasonable fees and collect said fees from all users of any new landfills. The Corporation is further authorized to accept grants, loans, or other revenues from whatever source,

to which the individual parties might be entitled for the operation of this facility.

Each participating entity in this Agreement agrees to use its powers of eminent domain and zoning if called upon by the Corporation to do so for the purpose of acquiring any necessary real property or interest in real property for the use of the Corporation in carrying out the purposes for which it is organized; provided, however, the Corporation shall reimburse the party exercising such powers for all costs and expenses associated therewith.

12. This Agreement shall terminate at the end of its expressed duration or may be terminated earlier by a vote of the Corporation, provided at least two-thirds of the vote is in favor of so terminating. However, this Agreement may not be terminated and the Corporation may not be dissolved or otherwise abolished so long as there are outstanding obligations of the Corporation unless suitable arrangements are made for the payment of all outstanding obligations; provided, however, the parties may jointly or severally assume all obligations of the Corporation and thereupon terminate this Agreement. Upon termination and the satisfaction of obligations, the property of the Corporation, both real and personal, shall be divided among the parties hereto according to their respective then existing ownership interest or shall be sold and the proceeds thereof likewise divided.

13. The Corporation shall have a fiscal year commencing on July 1st and terminating on June 30th of the succeeding calendar year. The Corporation shall cause its budget to be adopted for the operation of the facility under its control. In addition, the Corporation shall cause an annual audit to be conducted, said audit to be conducted by an independent Certified Public Accountant, which audit shall be conducted according to standard accepted

principles of accounting and as required by this Agreement and state law. Each party hereto shall receive a copy of the annual budget and audit of the Corporation.

14. This Agreement shall become effective only upon the proper authorization and execution of this Agreement by all of the respective parties as evidenced by their signatures below.

CITY OF GATLINBURG, TENNESSEE

BY *Sam Hays*  
MAYOR

ATTEST:

*Windy M. Camero*  
CITY RECORDER

CITY OF PIGEON FORGE, TENNESSEE

BY *English Mc Carter*  
MAYOR

ATTEST:

*Elsie Cole*  
CITY RECORDER

CITY OF SEVIERVILLE, TENNESSEE

BY *Charlie R. Johnson*  
MAYOR

ATTEST:

*Les Valentine*  
CITY RECORDER

COUNTY OF SEVIER, TENNESSEE

BY *Sanny Waters*  
COUNTY EXECUTIVE

ATTEST:

*Paul Atchley*  
COUNTY CLERK

STATE OF TENNESSEE

COUNTY OF SEVIER, TO-WIT:

Before me, the undersigned Notary Public, personally appeared JERRY HAYS, with whom I am personally acquainted and who, upon oath, acknowledged himself to be the Mayor of the City of Gatlinburg, Tennessee, the within bargainer, and that he as such Mayor, being authorized so to do, executed the foregoing Agreement for and on behalf of said City and for the purposes therein contained.

WITNESS my hand this 1st day of December, 1988.

Betty C. Goode  
NOTARY PUBLIC

My commission expires 8-3-92.

STATE OF TENNESSEE

COUNTY OF SEVIER, TO-WIT:

Before me, the undersigned authority, personally appeared ENGLISH McCARTER, with whom I am personally acquainted and who, upon oath, acknowledged himself to be the Mayor of the City of Pigeon Forge, Tennessee, a municipal corporation, the within bargainer, and that he as such Mayor, being authorized so to do, executed the foregoing Agreement for and on behalf of said City and for the purposes therein contained.

WITNESS my hand this 5 day of December 1988.

Deborah E. Newman  
NOTARY PUBLIC

My commission expires 8-3-92.

STATE OF TENNESSEE

COUNTY OF SEVIER, TO-WIT:

Before me, the undersigned authority, personally appeared CHARLIE JOHNSON, with whom I am personally acquainted and who, upon oath, acknowledged himself to be the Mayor of the City of Sevierville, Tennessee, a municipal corporation, the within bargainer, and that he as such Mayor, being authorized so to do, executed the foregoing Agreement for and on behalf of said City and for the purposes therein contained.

WITNESS my hand this 6th day of December, 1988.

Debra K. Oltman  
NOTARY PUBLIC

My commission expires 1/22/91.

STATE OF TENNESSEE

COUNTY OF SEVIER, TO-WIT:

Before me, the undersigned authority, personally appeared LARRY WATERS, with whom I am personally acquainted, and who acknowledged himself to be the County Executive of the County of Sevier, Tennessee, and that he, as such County Executive, being authorized so to do, executed the foregoing Agreement for and on behalf of said County, for the purposes therein contained.

WITNESS my hand this 6<sup>th</sup> day of December, 1988.

Elizabeth A. Long  
NOTARY PUBLIC

My commission expires 7-19-89.

LANDFILL TONNAGE --- July 1, 1987 - June 30, 1988

<u>ENTITY</u>	<u>Tons/Year</u>	<u>% Per Year</u>
Pigeon Forge	8,026.590	20.71%
Sevierville	9,374.340	24.18%
Gatlinburg	9,507.860	24.53%
Sevier County	11,857.238	30.59%
<b>TOTALS</b>	<b>38,766.028</b>	<b>100.01%</b>

EXHIBIT "A"

Secretary of State

Corporations Section

James K. Polk Building, Suite 1800

Nashville, Tennessee 37219

DATE: 12/13/88  
REQUEST NUMBER: 1074-05 7  
TELEPHONE CONTACT: (615) 741-0507  
FILE DATE/TIME: 12/12/88 1301  
EFFECTIVE DATE/TIME: 12/12/88 1301  
CONTROL NUMBER: 0210155

TO:  
SHARP & RIPLEY  
COMMERCE STREET  
P O BOX 530  
SEVIERVILLE, TN 37862

RE:  
SEVIER SOLID WASTE, INC.  
CHARTER - NONPROFIT

CONGRATULATIONS UPON THE INCORPORATION OF THE ABOVE ENTITY IN THE STATE OF TENNESSEE. THE CHARTER DOCUMENT IS ENCLOSED AND IS EFFECTIVE AS INDICATED ABOVE.

PLEASE BE ADVISED THAT THIS DOCUMENT MUST ALSO BE FILED IN THE OFFICE OF THE REGISTER OF DEEDS IN THE COUNTY WHEREIN A CORPORATION HAS ITS PRINCIPAL OFFICE IF SUCH PRINCIPAL OFFICE IS IN TENNESSEE.

A CORPORATION ANNUAL REPORT MUST BE FILED WITH THE SECRETARY OF THE STATE ON OR BEFORE THE FIRST DAY OF THE FOURTH MONTH FOLLOWING EACH ANNIVERSARY DATE OF INCORPORATION. THIS OFFICE WILL MAIL THE REPORT DURING THE ANNIVERSARY MONTH TO THE CORPORATION AT THE ADDRESS OF ITS PRINCIPAL OFFICE OR TO A MAILING ADDRESS PROVIDED TO THIS OFFICE IN WRITING. FAILURE TO FILE THIS REPORT OR TO MAINTAIN A REGISTERED AGENT AND OFFICE WILL SUBJECT THE CORPORATION TO ADMINISTRATIVE DISSOLUTION.

WHEN CORRESPONDING WITH THIS OFFICE OR SUBMITTING DOCUMENTS FOR FILING, PLEASE REFER TO THE CORPORATION CONTROL NUMBER GIVEN ABOVE.

STATE OF TENNESSEE, SEVIER COUNTY

The foregoing Instrument and Certificate were noted in  
Note Book 40 Page 238 At 12:30 clock P.M. 12-16 1988  
Item No. 9472; Recorded Misc. Book 150 Page 422  
State Tax \_\_\_\_\_ Fee \_\_\_\_\_ Recording 7.50 Ct. House Fund 0.00  
Total 9.50 Receipt 1075

Witness My Hand

*Veryl Henderson*  
Register

FOR: CHARTER - NONPROFIT

RECEIVED: \$50.

ON DATE: 12/13/88

FROM:  
SHARP & RIPLEY  
COMMERCE STREET  
P O BOX 530  
SEVIERVILLE, TN 37862

RECEIPT NUMBER: 000086  
ACCOUNT NUMBER: 0000165

422

*Gentry Crowell*

GENTRY CROWELL  
SECRETARY OF STATE



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SECRETARY OF STATE

CHARTER

OF

SEVIER SOLID WASTE, INC.

The undersigned, a citizen of the United States of America and the State of Tennessee, for the purpose of forming a corporation not for profit under and pursuant to the Tennessee Nonprofit Corporation Act, 48-51-101 et seq., does hereby adopt the following Charter for such corporation:

1. Name. The name of the corporation shall be Sevier Solid Waste, Inc.

2. Duration. The duration of the corporation shall be perpetual, but the directors may dissolve the corporation sooner if they shall deem such dissolution advisable. Provided, however, in the event of dissolution, upon the repayment of any lawfully incurred indebtedness of said corporation the title to any property acquired by reason of said indebtedness shall vest in the four entities which are parties to the Interlocal Cooperation Agreement which authorized the existence of this corporation, in the proportion of their then existing proportionate interests.

3. Address. The address of the principal office of the corporation in the State of Tennessee shall be 123 Commerce Street, Sevierville, Tennessee 38762, County of Sevier.

4. Not For Profit. The corporation is not for profit. The corporation is a public benefit corporation.

5. Purposes. The purposes for which the corporation is formed and the objects to be carried on and promoted by it are as follows:

(a) To receive and further administer funds in order to acquire, construct, equip and maintain a solid waste landfill and related facilities for Sevier County, and to that end, to take and hold by bequest, devise, gift, grant, purchase, lease or otherwise any property, real, personal, tangible or intangible, or any undivided interest therein, without limitation as to amount or value; to sell, convey or otherwise dispose of any such property and to invest, reinvest, or deal with the principle or the income thereof in such manner as, in the judgment of the directors, will best promote the

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SECRETARY OF STATE

Purposes of the corporation without limitation, except such limitations, if any, as may be contained in the instrument under which such property is received, this Charter of Incorporation, the By-Laws of the corporation, or any laws applicable thereto;

(b) To arrange for the disposal of solid waste through appropriate disposal methods including, but not limited to recycling, landfilling, incineration or such other technology as is available or, in the alternative, to contract with others for the hauling or disposal of such solid waste.

(c) To remain continuously organized and operated exclusively as a not for profit corporation for the above-stated purpose; and

(d) To act on behalf of the four entities which are parties to the Interlocal Cooperation Agreement which authorized the existence of this corporation in carrying out its purposes.

6. Powers. In furtherance and not in limitation of the general powers conferred by the laws of the State of Tennessee, and the purposes set forth herein, it is expressly provided that the corporation shall have the following powers:

(a) To enter into, make and perform leases and contracts of every sort and kind with any person, firm, association, corporation, municipality, body politic, county, state, or with the United States of America or any agency or instrumentality thereof;

(b) To contract indebtedness including, without limit, bonds, notes or other obligations as to amount for any of the purposes of the corporation and to secure the same to the extent necessary by mortgage, deed or deeds of trust, or pledge or lien on any or all of the real or personal property, or both, or right, title and interest therein, of the corporation;

(c) To advance or lend money to, or otherwise invest in any person, firm, association, corporation, municipality, body politic, county or state in such manner and upon such terms as are deemed expedient;

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(d) To acquire, own, hold, sell, negotiate, assign, deal in, exchange, transfer, mortgage, pledge or otherwise dispose of mortgages, notes, evidences of indebtedness, bonds, and all other securities or choses in action issued or created by any person, firm, association, corporation, municipality, body politic, county, state or with the United States of America or any agency or instrumentality thereof;

(e) To acquire by lease, purchase, lease back, mortgage, deed of trust or otherwise, real estate or any interest therein from others, to construct, rehabilitate, or otherwise acquire and equip buildings and structures which may be utilized for any purposes authorized by law.

(f) To sell, lease, sublease or otherwise make available to any person, firm, association, corporation, municipality, county or state any real estate or interest therein acquired by the corporation;

(g) To acquire, whether by purchase, construction, exchange, gift, lease, or otherwise, and to improve, repair, extend, equip, furnish, operate and maintain one or more projects, which projects may be within or without the county with respect to which the corporation shall have been created, including all real and personal properties which the board of directors of the corporation may deem necessary in connection therewith and regardless of whether or not any such projects shall then be in existence and including the power to demolish such existing structures as may be on sites acquired when such structures are not needed for the project;

(h) To operate, maintain, manage, and to enter into contracts for the operation, maintenance and management of any project undertaken, and to make rules and regulations with regard to such operation, maintenance and management;

(i) To procure and enter into contract for any type of insurance or indemnity against loss or damage to property from any cause, including loss of use and occupancy, against death or injury of any person, against employer's liability, against

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any act of any member, officer or employee of the authority in the performance of the duties of his office or employment or any other insurable risk, as the board of directors in its discretion may deem necessary;

(j) To accept donations, contributions, capital grants or gifts from any individuals, associations, municipal or private corporations, the State of Tennessee and the United States of America, or any agency or instrumentality thereof, for or in aid of any of the purposes of this charter and to enter into agreements in connection therewith;

(k) To borrow money from time to time and in evidence of the obligation thereby incurred to issue and sell its obligations in such amount or amounts as the board of directors may determine to provide funds for the purpose of financing, acquiring, erecting, extending, improving, equipping or repairing any project or for any combination of such purposes, and demolishing structures on the project site and acquiring a site or sites necessary and convenient for such project, including but without in any way limiting the generality of the foregoing, architectural, engineering, legal, financing and bonds insurance expenses, and including an amount sufficient to meet the interest charges on such obligations during construction of any project and for two (2) years after the estimated date of completion; and to refund and refinance, from time to time, revenue bonds so issued and sold, as often as may be deemed to be advantageous by the board of directors; and pending the issuance of its revenue bonds, for the purposes in this chapter authorized, to issue its interim certificates or notes and other temporary obligations;

(l) To enter into any agreement or contract with any lessee, who, pursuant to the terms of this charter, is renting or is about to rent from the corporation all or part of any building or buildings or facilities, whereby under such agreement or contract the lessee obligates itself to pay all or part of the cost of maintaining and operating the premises so leased. Such agreement may be included as a provision of any lease entered into pursuant to the terms of this charter or may be made the

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the corporation and such lessee;

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(m) As security for the payment of the principal and interest on any obligations so issued and any agreements made in connection therewith, to mortgage and pledge any or all of its projects or any part or parts thereof, whether then owned or thereafter acquired, and to pledge the revenues and receipts therefrom or from any part thereof, and/or to assign and pledge all or any part of its interest in and rights under the leases, sales contracts or loan agreements relating thereto or any thereof;

(n) To exercise all powers expressly given in its certificate of incorporation and to establish by-laws and make all rules and regulations not inconsistent with the certificate of incorporation or the provisions of this charter, deemed expedient for the management of the affairs of the corporation;

(o) To appoint a general manager who shall be experienced in the operation and management of a solid waste landfill or like or similar facilities to operate and manage the facility and perform such other duties as may be conferred upon the general manager by the board. The general manager shall, with the approval of the board, appoint such assistants or employees as may be necessary for the effective and efficient operation of the project. To that end, all personnel actions, including, but not limited to, appointment, promotion and retention shall be made on the basis of merit and fitness alone without regard to any political test, qualification, affiliation, association or opinion. All personnel actions shall be taken on a non-discriminatory basis consistent with general law.

(p) To do everything necessary, proper, convenient or incident to effect any or all of the purposes for which the corporation is organized; and

(q) Without limiting the generality of the foregoing, this corporation shall have all the powers, privileges, rights and immunities necessary or convenient for carrying out the purposes for which

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SENTRY CROWELL  
SECRETARY OF STATE

this corporation is formed, and the directors hereby claim for this corporation all the benefits, privileges, rights and powers created, given, extended or conferred, now or hereafter, by the provisions of all applicable laws of the State of Tennessee, pertaining to not for profit corporations and any additions or amendments thereto.

7. Designated Registered Agent. The name and street address of the registered agent in the State of Tennessee shall be: Ronald E. Sharp, 123 Commerce Street, Sevierville, Sevier County, Tennessee 37862.

8. Membership. The corporation is organized on a non-stock basis only. There shall be no shareholders or members of the corporation, and this corporation shall be deemed to be performing essential public functions.

9. Directors. This corporation shall have a board of directors in which all power of the corporation shall be vested and which shall be four in number. Each governmental entity that is a party to the Interlocal Cooperation Agreement dated November 30, 1988, shall be entitled to appoint one member to the Board of Directors. Each Director so appointed shall vote and carry the weight of that governmental entity's proportionate interest as set forth in Exhibit "A" to the Interlocal Cooperation Agreement referenced, above as amended on an annual basis. That initial percentage is shown on Exhibit "A" attached hereto and incorporated herein by reference. The initial Board of Directors and the governmental entity they represent are as follows:

<u>Name</u>	<u>Address</u>	<u>Term Expiring</u>
Cindy M. Cameron Acting City Manager City of Gatlinburg	City Hall Gatlinburg, TN 37738	Indefinite
Earlene Teaster City Manager City of Pigeon Forge	City Hall Pigeon Forge, TN 37863	Indefinite
Russell Treadway City Administrator City of Sevierville	City Hall Sevierville, TN 37862	Indefinite
Larry Waters County Executive County of Sevier	Courthouse Sevierville, TN 37862	Indefinite

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CLERY WARD  
SECRETARY OF STATE

All vacancies in the board of directors shall be filled upon the expiration of term in the same manner. Each director shall have one vote in the election of officers. There shall be no individual liabilities against any director or directors for corporate debt.

10. Incorporator. The name and address of the incorporator is as follows: Ronald E. Sharp, 123 Commerce Street, Sevierville, Tennessee 37862.

11. Statement of Assets. The corporation now possesses no assets of any nature, real or personal.

12. Amendments. This charter may be altered, amended or repealed as provided by law except the non-profit character of the corporation may not be amended or altered and paragraphs 2, 8, 9 and 14 shall not be subject to amendment.

13. By-Laws. The business and conduct of affairs of the corporation shall be regulated by by-laws adopted by the board of directors, which shall not be inconsistent with the laws of the State of Tennessee and the Charter.

14. Provisions for Regulation and Conduct of the Affairs of the Corporation. Other provisions, consistent with the Laws of the State of Tennessee, for the regulations and conduct of the affairs of this corporation, and creating, defining, limiting or regulating the powers of this corporation or of the directors are as follows:

(a) The corporation is non-profit, non-stock corporation and no part of the net earnings shall inure to the benefit of any member, director or officer of the corporation, or any private individual (except that reasonable compensation may be paid for services rendered to or for the corporation affecting one or more of its purposes), and no member, director or officer of the corporation or any private individual shall be entitled to share in the distribution of any of the corporate assets on dissolution of the corporation. No substantial part of the activities of the corporation shall be the carrying on of propaganda, or otherwise attempting to influence legislation, and the corporation shall not participate in or intervene in (including the publication or distribution of statements) any political campaign on behalf of any candidate for public office.

(b) Notwithstanding any other provisions of this Charter, the corporation shall not conduct

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SECRETARY OF STATE

carry on any activities not permitted to be conducted or carried on by an organization exempt under Section 501(c)(3) of the Internal Revenue Code and Regulations promulgated thereunder as they now exist or as they may hereafter be amended, or by an organization, contributions to which are deductible under Section 170(c)(2) of such Code and Regulations as they now exist or as they may hereafter be amended.

(c) All of the assets of the corporation shall be held in trust for the purposes herein mentioned, including the payment of all of the corporation's liabilities. Upon dissolution of the corporation, title to or other interest in any real or personal property that is owned by the corporation at such time, after the payment of all of its liabilities, shall vest in and be transferred to the four entities which are parties to the Interlocal Cooperation Agreement which authorized the existence of this corporation, or their successors in interest, or failing such succession, as a court of law or equity may determine, but in any case such distribution shall be made exclusively to charitable, religious, scientific, testing for public safety, literary, or educational organizations which would then qualify as exempt under the provisions of Section 501(c)(3) of the Internal Revenue Code and its regulations as they now exist or as they may hereafter be amended.

IN WITNESS WHEREOF, I have hereunto subscribed my name this 7th day of December, 1988.

Ronald E. Sharp  
RONALD E. SHARP, INCORPORATOR

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93 DEC 12 PM 1:01 LANDFILL TONNAGE --- July 1, 1987 - June 30, 1988

<u>ENTITY</u>	<u>Tons/Year</u>	<u>% Per Year</u>
Pigeon Forge	8,026.590	20.71%
Sevierville	9,374.340	24.18%
Gatlinburg	9,507.860	24.53%
Sevier County	11,857.238	30.59%
<b>TOTALS</b>	<b>38,766.028</b>	<b>100.01%</b>

431

EXHIBIT "A"



## **SEVIER SOLID WASTE, INC.**

943 Centerview Rd. · P.O. Box 4520  
Sevierville, Tennessee 37864  
(615) 453-5676 · FAX (615) 429-2373

### Board of Directors

#### Chairman:

Cindy Cameron Ogle  
Gatlinburg City Manager  
Post Office Box 5  
Gatlinburg, TN 37738

#### Vice-Chairman:

Larry Waters  
Sevier County Executive  
125 Court Ave., Suite 201E  
Sevierville, TN 37862

#### Secretary-Treasurer:

Earlene M. Teaster  
Pigeon Forge City Manager  
Post Office Drawer 1350  
Pigeon Forge, TN 37868-1350

Jim Wagner  
Interim City Administrator  
City of Sevierville  
Post Office Box 5500  
Sevierville, TN 37864-5500

RESOLUTION

A RESOLUTION CREATING SEVIER 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. titled "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, Sevier County's Board of County Commissioners has given consideration to the needs assessment prepared by the East Tennessee Development District; and

WHEREAS, T.C.A. §68-211-813 requires that counties

in the State of Tennessee form 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 waste 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 Sevier County; and

WHEREAS, Sevier County and the Cities of Gatlinburg, Pigeon Forge and Sevierville have previously created a Tennessee not-for-profit corporation pursuant to an Inter-local Cooperation Agreement for the express purpose of dealing with all matters related to solid waste disposal including planning and implementation of same and such entity, Sevier Solid Waste, Inc. (SSWI) has been in existence since December 13, 1988.

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Sevier 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 Sevier

County, Tennessee; and

BE IT FURTHER RESOLVED that, pursuant to T.C.A. §68-211-813(a)(2), the Board of County Commissioners of Sevier County, Tennessee finds and determines that Sevier County shall be and shall constitute a single county municipal solid waste region due to the following: That a plan has been adopted proposing that Sevier County constitute a single county municipal planning region and, pursuant thereto, Sevier Solid Waste, Inc. is in the process of permitting a new landfill and constructing a composting facility sized to serve Sevier County alone; and

BE IT FURTHER RESOLVED that pursuant to T.C.A. §68-211-813(b), Sevier Solid Waste, Inc. is hereby designated as the appropriate board to administer the activities of the Region; and

BE IT FURTHER RESOLVED that Sevier Solid Waste, Inc. shall continue to be composed, organized and existing in the form previously approved by all participants and on-going; that the board and officers of said SSWI shall continue to be appointed and serve as provided in that organization's charter, by-laws and other documents of creation. Since the creation of Sevier Solid Waste, Inc. required the approval of the legislative bodies of all participating governmental entities, no further legislative approval, pursuant to statute, is required to designate Sevier Solid Waste, Inc. as the appropriate board to serve the Region; and

BE IT FURTHER RESOLVED that the Sevier Solid Waste, Inc. 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 regional plan, it shall be empowered to utilize existing Sevier 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 Sevier County's services, facilities and records in completing this task; and

BE IT FURTHER RESOLVED, that Sevier Solid Waste, Inc., in the furtherance of its duty to produce a municipal solid waste regional plan, is authorized to apply for and receive funds from the State of Tennessee, the federal government, Sevier County, the Cities of Gatlinburg, Pigeon Forge and Sevierville, and to apply for and receive donations and grants from private corporations and foundations; and

BE IT FURTHER RESOLVED that Sevier Solid Waste, Inc. shall receive, disburse and act as the fiscal agent for the administration of funds of the Municipal Solid Waste Region; 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 Sevier County shall transmit a copy of this Resolution to the Tennessee State Planning Office.

RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF SEVIER COUNTY, TENNESSEE, this \_\_\_ day of November, 1992, the welfare of the citizens of Sevier County requiring it.

APPROVED:

*Samuel Waters*  
COUNTY EXECUTIVE

ATTEST:

*Joe T. Keener II*  
COUNTY CLERK



**SEVIER SOLID WASTE, INC.**

943 Centerview Rd. · P.O. Box 4520  
Sevierville, Tennessee 37864  
(615) 453-5676 · FAX (615) 429-2373

January 27, 1994

Mr. Paul Evan Davis  
Department of Environment & Conservation  
Division of Solid Waste Assistance  
401 Church street  
Nashville, TN 37243

Dear Mr. Davis:

The UT 1989 base year data for Sevier County is not accurate. According to Gatlinburg tonnage figures, the government total for the year was 45,336.997 ton (as compared to 36,400 from UT study). This figure does not include restaurant grease and private hauler tonnage for 1989 which would add an additional 10 to 12 percent to the total.

Because of this discrepancy in the 1989 figures, I would prefer to use the correct 1991 figures from the Sevier County Solid Waste Needs Assessment. These figures are as follows: 1991 waste generation was 55,000 tons; projected population for 1991 was 52,144; per capita waste generation rate for Sevier County was 1.05 tons/person/year (55,000 divided by 52,144).

Thank you for your assistance in this matter.

Sincerely,

John deMoll



STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION

401 Church Street  
Nashville, Tennessee 37243

February 22, 1994

Mr. John deMoll:  
Sevier Solid Waste, Inc.  
943 Centerview Rd.  
P. O. Box 4520  
Sevierville, TN 37864

Dear Mr. deMoll:

We have received and reviewed your request for an adjustment in the base year from 1989 to 1991 regarding municipal solid waste disposed of from Sevier County. Unfortunately, only counties which did not have collection as of January 1, 1991 are eligible for variances to change the base year from 1989 to another year. However, it does appear that you have a valid concern for correction of your base year data. You do have the option for a base year adjustment by applying your more accurate disposal rate established in 1991 to your 1989 population.

Additionally, all requests for base year adjustments need to come through the regional solid waste planning board. In order to adjust this situation and process your request, we need the following documentation and information for our files:

1. That you request adjustment of your base year (1989) disposal rate to the more accurate disposal rate of 1.05 tons/person/year from the figure previously arrived at in the U.T. study. Through this process your base year would remain 1989 but your disposal rate for that year would change.
2. A letter signed by the chairman of the regional solid waste planning board in which it states the board concurs with your request.

We look forward to approving and processing your request upon receipt of this information.

Sincerely,

A handwritten signature in cursive script that reads "Paul E. Davis".

Paul E. Davis, Director  
Division of Solid Waste Assistance

PED:GHD:dhm



**SEVIER SOLID WASTE, INC.**

943 Centerview Rd. · P.O. Box 4520  
Sevierville, Tennessee 37864  
(615) 453-5676 · FAX (615) 429-2373

March 1, 1994

Paul Evan Davis, Director  
Division of Solid Waste Assistance  
State of Tennessee  
Department of Conservation and Environment  
401 Church Street  
Nashville, TN 37243

Dear Mr. Davis:

This letter is to request an adjustment of Sevier County's base year (1989) disposal rate to the more accurate disposal rate of 1.05 tons/persons/year from the figure previously arrived at in the U.T. study

Thank you for your assistance with this matter.

Sincerely,

John deMoll  
General Manager



**SEVIER SOLID WASTE, INC.**

943 Centerview Rd. · P.O. Box 4520  
Sevierville, Tennessee 37864  
(615) 453-5676 · FAX (615) 429-2373

March 1, 1994

Paul Evan Davis, Director  
Division of Solid Waste Assistance  
State of Tennessee  
Department of Conservation and Environment  
401 Church Street  
Nashville, TN 37243

Dear Mr. Davis:

The Board of Directors of Sevier Solid Waste, Inc. concurs with Mr. deMoll's request to adjust the base year (1989) disposal rate for Sevier County to 1.05 tons/person/year from the figure previously arrived at in the U.T. study. We feel that this will more accurately portray the solid waste tonnage figures for Sevier County.

Thank you for your assistance with this matter.

Sincerely,

Cindy Cameron Ogle  
President



STATE OF TENNESSEE  
**DEPARTMENT OF ENVIRONMENT AND CONSERVATION**  
401 Church Street  
Nashville, Tennessee 37243

March 10, 1994

Ms. Cindy Cameron Ogle  
President  
Sevier Solid Waste, Inc.  
943 Centerview Road  
P.O. Box 4520  
Sevierville, TN 37864

Dear Ms. Ogle:

We have received and reviewed your request for a base year adjustment of Sevier County's annual per capita disposal rate from 0.71 tons ( the rate calculated from the 1989 U.T. survey) to 1.05 tons ( the figure which was calculated from the East Tennessee Development District's Needs Assessment for Sevier county). It appears that you have a valid concern for correction of your base year data. Therefore, we approve Sevier County's base year data as adjusted to reflect an annual per capita disposal rate of 1.05 tons.

Should you require any further assistance on this or other matters, please do not hesitate to contact our office.

Sincerely,

Paul Evan Davis  
Director  
Division of Solid Waste Assistance

PED:GHD:dhm

## APPENDIX C

The monthly board meetings for Sevier Solid Waste are advertised and open to the public. Since the solid waste plan developed in October, 1990 has already been implemented, there has been very little attendance by the general public. However, the meetings are covered by the local newspaper, The Mountain Press, and the public is also kept informed by the educational program previously described in Chapter IX. The general manager has given numerous speeches to every civic group in the county concerning the solid waste program.

In 1992, a scale model of the composting plant was constructed. This model is displayed at different locations (schools, welcome centers, library, etc.) throughout the county. In addition, a pamphlet explaining the solid waste program is distributed free of charge to local citizens.

A public hearing was held on the Sevier County solid waste plan. In attendance were the following individuals: Mrs. Kathy Miller, Mr. Mark Cordosa, Dr. George Hyfantis, Mr. Leonard Waring, Mr. Gary Henderson, Jack Flynt, members of the board of directors and the general manager of SSWI. Comments were made regarding the possibility of recovering and utilizing methane gas from the old landfills. In addition, opinions were expressed regarding the development of soccer fields on former landfills. The general concensus was that the topography of the old sites would not allow development of a major complex.