LOUDON COUNTY REGIONAL SOLID WASTE MANAGEMENT PLAN

As Required By

The Solid Waste Management Act of 1991

T.C.A. 68-31-813 (c) and 68-31-815

Prepared for and Submitted to
The Tennessee State Planning Office
and
The Department of Environment and Conservation,
Division of Solid Waste Assistance

November 15, 1994

TABLE OF CONTENTS

PART 1		
EXECUTI	VE SU	MMARY
PART II		
INTRODU	CTION.	
CHAPTER	I.	Description of the Municipal Solid Waste Region
CHAPTER	II.	Analysis of the Current Solid Waste Management System for the Region
CHAPTER	III.	Growth Trends, Waste Projections, and Preliminary System Structure
CHAPTER	IV.	Waste Reduction36
CHAPTER	v.	Waste Collection and Transportation41
CHAPTER	VI.	Recycling45
CHAPTER	VII.	Composting, Solid Waste Processing, Waste-to-Energy and Incineration Capacity49
CHAPTER	VIII.	Disposal Capacity51
CHAPTER	IX.	Public Information and Education58
CHAPTER	х.	Problem Wastes60
CHAPTER	XI.	Implementation: Schedule, Staffing and Funding64
CHAPTER	XII.	Allocation of Implementation Responsibilities: Plan Adoption and Submission66
CHAPTER	XIII.	Flow Control and Permit Application Review67
PART III	. APPI	ENDICES
	B. Do	egal Documentaton and Organization of the Region69 ocumentation for Adjustments to the Base Year
APPENDIX	C. Pu D. Ex E. Re	eneration
Д DDH MDT Y	' Fr 10	-Vear Disposal Contract Between LCSWDC and Santok74

PART I

EXECUTIVE SUMMARY

PART I.

EXECUTIVE SUMMARY

Part I, The Executive Summary provides an overview of the Loudon County Region's Solid Waste Management Plan, as described in detail in Parts II and III.

A. GENERAL DESCRIPTION OF THE REGION:

Loudon County is a single county region with a population of 32,132 and an area of 228.6 square miles. Loudon County is bordered on the north by Knox County, the west by Roane County, the south by Monroe County and the east by Blount County. The Tennessee River and I-75 run from the north to the south end of Loudon County. According to population projections compiled by the Sociology Department of the University of Tennessee, Loudon County's population will increase 9.6 percent between 1990 and 2000. TVA figures project a more rapid growth due to residential expansion of the Tellico Village community. The solid waste plan takes into account these estimated demographic changes in population.

B. RATIONALE FOR REGION FORMATION:

Loudon County is a single county region. Under T.C.A. Sections 68—31—815(b)(12), 68—31—813(a)—(e) and 68—31—814(b)(1) and (15)], Loudon County must state specific reasons why it failed to adopt a multicounty option. The Loudon County Solid Waste Disposal Commission decided to adopt a single county region for the following reasons:

(1) Loudon County wishes to retain control over its waste stream;

(2) Loudon County has the resources to meet its waste reduction goals and landfill capacity assurances without the need for agreements with neighboring counties;

(3) A single county region was deemed the most cost—effective and environmentally—sound strategy for Loudon County to adopt and;

(4) The East Tennessee Development District recommended a single county region during the initial planning phase.

C. INSTITUTIONAL STRUCTURE:

In 1987, Loudon County established a five member Loudon County Solid Waste Disposal Commission (LCSWDC). In 1993, the LCSWDC was expanded to seven members. Five members were appointed by the County Executive and approved by the County Commission, and one member each was appointed by the Mayors of the cities of Lenoir City and Loudon, and approved by the respective City Councils.

The purpose of the LCSWDC is to:

 Provide procurement and overall supervision of the landfill in terms of establishing policies and procedures, setting tip fees, contracting for and supervising operations, and

- 2. Develop and implement a ten-year solid waste management plan in accordance with T.C.A. 68-211-801 et seq. The LCSWDC is authorized under an intergovernmental agreement between the City of Lenoir City, County of Loudon, and the City of Loudon, made in September 1983 and amended in June 1987 and March 1993. The LCSWDC has several times by way of announcements in meetings and in local papers requested volunteers for a citizens advisory council. To date, advisors include local experts from CTAS, MTAS, the East Tennessee Development District, TVA, and Keep America Beautiful. The public is invited to all meetings and workshops of the LCSWDC. Meetings are publicly announced and held at least once per month. Three public workshops were held from December 1993 until March 1994 about the solid waste plan and the proposed solid waste disposal contract. The ten-year landfill contract was signed April 5, 1994.
- 3. Provide recommendations to the County for other solid waste management strategies.

Two public workshops were held on July 16, and 21 1994 to provide public input on the final draft of the solid waste plan.

Santek Environmental Services, Inc., operator of the Matlock Bend Landfill, has also organized a landfill citizens advisory committee to provide input into the operation of the landfill. Committee members are listed in Appendix C.

D. SUMMARY OF CURRENT CONDITIONS AND REGIONAL NEEDS

1. Waste Reduction and Recycling

Loudon County landfilled approximately 125,000 tons of solid waste in 1993. The composition of the waste stream is as follows: residential (10%); commercial (14%); institutional (8%); and industrial (68%). The composition of the waste stream shows the greatest potential for waste reduction in the commercial and industrial sectors. In March 1994, Kimberly Clark announced their intention to divert approximately 200 tons per day from the their waste disposed of at the Matlock Bend landfill beginning April 1995.

A Loudon County Waste Reduction Taskforce which includes the Loudon County Chamber of Commerce and the Tennessee Valley Authority is currently being organized to work with other large commercial/industrial generators. The taskforce will also determine how recycling programs for residential customers can be expanded.

Currently, Loudon County provides one drop-off recycling collection station. Two materials are collected—newspaper and aluminum cans. In 1993, the total amount of materials recycled from the recycling station was 116 tons. Keep America Beautiful of Loudon County (the Loudon County Beautification Board) sponsors the drop-off recycling center at the convenience center located next to the animal shelter on Rock Quarry Road in the City of Loudon. The contact person is Ann Hammontree.

2. Waste Processing and Transfer

a). Recycling Processing

A recycling processing facility is owned and operated by Tennessee Waste Movers, Inc. in Lenoir City. The owner/operator is Sandy Gillman, 12816 Peachview Drive, Lenoir City, TN. The recyclables are

co-collected with refuse. At the facility, refuse is dumped onto a concrete floor, where a skid loader scoops it up and places it on conveyor belt. Recyclables are "picked" out of refuse. Residuals are disposed of at the Matlock Bend Landfill.

b). Transfer Station

The Loudon County Transfer Station is located at Rock Quarry Road. The operators are Jackie Wallace and Jim Rogers. At the facility, the county dump trucks bring solid waste to the transfer station and load it in 40 cubic yard compactors that are hauled to the landfill for disposal. Individual households also bring waste and place it in four 8 cubic yard dumpsters. The County contracts for the hauling of waste from the transfer station to the landfill for disposal. The current throughput rate is approximately 10 tons per day.

c).Waste to Energy/Incineration

Loudon County does not currently have any waste-to-energy facilities. There are no plans for public waste-to-energy facilities in the next ten years. Kimberly Clark is cunstructing an on-site

3. Composting

Loudon County is currently landfilling about 10,000 tons of yard and wood waste annually. Alternatives for composting yard waste and municipal solid waste are currently under consideration. The City of Loudon has a permitted compost facility for 75 tons per day, and the LCSWDC has discussed with Santek a program to divert yard and wood waste at the Class I landfill.

4. Waste collection

There are approximately 12,645 households in Loudon County. Currently, the City of Loudon and Lenoir City collect refuse from 4,585 households. Thus, 8,060 (12,645-4,585) households are not served by public curbside collection services. The Tennessee Law requires Counties to ensure that 90 percent of their households have adequate collection service through one of the following scenarios: (1) one convenience center per 5000 households unserved by public curbside collection, (2) the county could contract with private haulers to ensure that 90 percent of the households are served, or (3) if the county and the private sector are currently serving 90 percent of the households, then the county would not need formal agreements with the private haulers if the county passed a resolution saying that they would agree to provide services if the private haulers discontinued service.

Given the law, Loudon County has the following options to meet the minimum requirements of the law:

- 1. Add one additional convenience center;
- 2. Contract with all the private haulers in the county to ensure a 90 percent service rate; or
- 3. Since the county already has one convenience center, only 3,060 households are unserved by the public sector (assuming one convenience center serves 5000 households) If it can be shown

that the private sector is serving 1,795 households, then 90 percent of the residents would be served. The county would have to pass a resolution saying that they would provide service if the private haulers discontinued the current collection service. Tellico Village contracts with Waste Management for collection in serving its 800 residential units. Browning Ferris, V&R Garbage Service, and Tennessee Waste Movers all provide curbside collection in Loudon County; however they have not responded to the LCSWDC's request for a list of the households served in Loudon County. The LCSWDC has proposed to implement a policy at the Matlock Bend Landfill to identify the households served by private waste haulers using the landfill. In this manner the LCSWDC intends to ensure that 90 percent of the county's households are served with adequate refuse collection.

According to the 1993 Loudon County Solid Waste Needs Assessment, 1306 households were known to be served by private collection service. At some point in time, Loudon County may consider expanding its

convenience centers from one site located in the City of Loudon to two sites, with the additional site to be determined based on the needs of the county. A minimum of 3,000 households would be expected to use the additional convenience center, generating an average of 11 tons of solid waste per day. Loudon County would build the center in accordance with the Tennessee Convenience Center Rules 1200-1-7-.10(3)(b). The system would utilize thirty three 6-cubic-yard green boxes and an existing front loader. In addition to the collection of refuse, the center would also offer recycling collection. Under this scenario, the County would contract for the hauling of refuse to the landfill. Annualized capital and operating expenses for the entire system are estimated at \$79,600 annually. The estimated tons to be collected for the additional convenience center is 3000 per year. The cost per ton for collection at the new center is projected to be approximately \$26.50. Adding the disposal fee of \$32.25, the total cost of collecting and disposing of solid waste at the convenience center would be \$58.75.

5. Waste Disposal

The location of the Matlock Bend Landfill is on State Highway 72, 1.3 miles northwest of the I-75 interchange in Loudon. Loudon County has four phases planned of the Matlock Bend Landfill, owned by the Loudon County Solid Waste Disposal Commission and operated by Santek Environmental Services, Inc. The remaining planned and existing capacity for all four phases at the landfill as of January 1995 is estimated at 1,575,000 cubic yards. A detailed projection of capacity for the planning period is depicted in Tables VIII-1(a) and (b). The

projection of 1,575,000 cubic yards of capacity is based on Santek's modifications to the 1984 MCI plan. This capacity willprovide Loudon County with approximately 15 years of landfill capacity beginning January 1995.

While the projections in Tables VIII-1 and 2 show a surplus in capacity over the next ten years, the excess is estimated another five years, so the Loudon County region will monitor capacity closely through the planning period to determine whether an additional phase at the landfill should be permitted and constructed during the next ten-year planning period. No capacity shortfalls are projected during the planning period and there are no agreements to import waste from another region.

E. LOUDON COUNTY'S SOLID WASTE MANAGEMENT GOALS AND OBJECTIVES

1. Base Year

The population and quantity of solid waste generated and disposed of in calendar 1989 for Loudon County were 31,500 and 67,910, respectively. Thus, the waste generated and disposed of per capita was 2.16 tons per capita per year. This figure was the actual disposal amount reported by Santek Environmental Services operator of the Matlock Bend Landfill. It should be noted that the 1991 University of Tennessee (UT) Solid Waste Study estimated a waste generation 26,508 tons per year. For planning purposes, Loudon County will use the actual disposal figure reported by Santek and the City of Loudon and not the UT estimate.

Since the UT estimated quantity of waste managed in 1989 for any county in the region has been demonstrated to be in error, proof of the actual base figure was submitted to the Director of the State Planning Office and the Director of Solid Waste Assistance in accordance with T.C.A. Section 68-31-861(a) and (b). Copies of the error documentation for Loudon is included in Appendix B. Table IV-1 reflects the adjusted quantity.

- 2. Target 1995 Waste Reduction Per Capita Disposal Rate Using 1989 as a base year, the quantity of waste in tons, that must be reduced at the source, or diverted to alternative treatment options, if the region is to meet the statutory goal by December 31, 1995 is 17,673 tons per year. This figure was derived by using the following formula (1989 per capita rate x .25 x 1995 population = $2.16 \times .25 \times 32,728 = 17,673$ tons).
- F. HOW THE REGION WILL MEET THE STATEWIDE WASTE REDUCTION GOAL.

 Waste generation in Loudon County has fluctuated significantly since the 1989 Base Year. To understand how Loudon County expects to meet the 1995 waste reduction goal of 17,673 tons per year, the fluctuations in waste disposal since 1989 are presented for analysis:

Year	Landfill Disposal Volume
1989	67,910
1990	73,511
1991	106,798
1992	96,730
1993	125,732
1994 (est)	122,850
1995 (est)	68,591

The large increase in 1991 was due to an increase in industrial MSW (Kimberly Clark and others) disposed of at Matlock Bend Landfill. The reduction in 1992 was a result of Metal Resources's decision to divert 100 Tons per day to an out-of state facility. Shortly after Metal Resources waste diversion measure, Kimberly Clark began doubling their generation rates due to an expansion of the facility. The estimated reduction in 1995 is primarily due to a 200 ton/day anticipated industrial disposal reduction to begin in April 1995. Additional reduction is expected through other industries and residential recycling and yard waste composting. Using a base year of 1989, the target per capita waste reduction will not be met due to the expansion of industry waste generation in Loudon County. However, due to major waste reduction efforts in 1995, the anticipated 1995 landfill disposal quantity is projected to be 86 percent less than the quantity disposed of in 1993.

G. SYSTEM ELEMENTS INCLUDED IN THE LOUDON COUNTY SOLID WASTE MANAGEMENT PLAN

The elements of the 10-Year Solid Waste Management Plan include:

Waste Reduction

Waste Collection

Recycling (commercial, industrial, and residential)

Yard Waste/Municipal Solid Waste Composting

Class I and Class IV Landfills

Public Education and Participation

Problem Waste Management

The projected solid waste generation to be collected and managed in 1995 as a percent of the total projected amount handled by each system component is estimated below: (These estimates are based upon Chapters III-X).

Component	Tons per Year	Percent of Total
Industrial waste processing	53,000	51 percent
Residential Waste Recycling	550	1 percent
Yard Waste Diversion	9,000	7 percent
Landfill	64,000	41 percent
Total	125,000	100 percent

The new programs, services, and facilities will be coordinated with the existing system as follows:

1. Source Reduction

The Loudon County Solid Waste Disposal Commission (LCSWDC) is working in cooperation with the Loudon County Chamber of Commerce, the Tennessee Valley Authority, and local industries to conduct waste audits and to implement waste reduction practices. The LCSWDC is also working with the Loudon County Beautification Board, and Santek Environmental Services, and the State of Tennessee to develop educational programs to reduce household hazardous waste.

2. Waste Collection

The LCSWDC is working with Santek Environmental Services to implement a system to determine whether 90 percent of the residential population in Loudon County is served by public or private collection of refuse.

3. Recycling

The LCSWDC is working with Loudon County, Santek, and Keep America Beautiful to expand the county recycling collection center and include additional materials. The county is currently recovering newsprint and aluminum cans at the convenience center. The Loudon County Solid Waste Disposal Commission (LCSWDC) and the Loudon County Keep America Beautiful Agency are developing a plan to expand the materials collected at the drop-off recycling centers to include cardboard, glass and other materials as markets develop. Loudon County is a member of the Regional Marketing Cooperative of East Tennessee (RMCET). RMCET interacts with the Tennessee Office of Cooperative Marketing. Through these resources, Loudon County expects to pursue additional markets for recycled materials in the future. Loudon County will also work with regional industries such as Kimberly Clark and Bowater to expand the markets for mixed paper. Kimberly Clark is a regional end-user of mixed waste paper. Loudon County is considering alternatives for developing a local government purchasing and procurement policy for recycled products. The County intends to work with the Tennessee Office of Cooperative Marketing to develop sources for purchasing recycled materials. The LCSWDC is also working with Santek to divert and

recycle waste tires collected in Loudon County.

4. Composting

The Cities of Loudon and Lenoir City have been collecting and composting residents yard waste for over five years.

The Loudon County Disposal Commission is discussing with Santek Environmental Services the feasibility of diverting yard waste from the Class I landfill. The City of Loudon is currently investigating municipal solid waste (MSW) composting technologies. The City of Loudon has a permit by rule to construct a MSW/sludge composting facility.

5. Landfill Disposal

The estimated supply of waste requiring disposal and the estimated disposal capacity over the next ten years is depicted in Table VIII
1. On April 5, 1994, The LCSWDC entered into an agreement with Santek Environmental Services to design, construct, and operate Phases II, and IV of the Matlock Bend landfill.

6. Public Education and Participation

There are 24,189 adults and 5991 school—age children in Loudon County in need of education and information about solid waste reduction and disposal. Several sources for adult and student education exists for solid waste issues. The county relies on the local chapter of Keep America Beautiful (the Loudon County

Beautification Board) to develop recycling education and collection programs. The county provides financial support for the recycling collection programs. The local newspapers, particularly the News-Herald and the Loudon County Independent provide excellent coverage of all LCSWDC meetings as well as any events that impact solid waste decision making in the region. Four local radio stations also report on solid waste issues.

The Loudon County Beautification Board provides Waste in Place curriculum to Loudon County and Lenoir City schools. They also provide in—service training for public school teachers. The Loudon County Solid Waste Disposal Commission holds public workshops for adults and conducts county—wide surveys to obtain citizen input on solid waste policy decisions. Santek Environmental Services also coordinates a landfill advisory committee to provide input into the management of the Matlock Bend Landfill.

The LCSWDC will continue to encourage public education and information about solid waste issues by inviting the public to all meetings, working with the Beautification Board on educating school children, and conducting public opinion surveys.

7. Problem Waste Management

The Solid Waste Management Act requires planning regions to describe how the regional programs will handle waste oil, automobile batteries, and tires, as well as to state how they will interface with the state household hazardous waste collection service. The

1991 Solid Waste Management Act bans disposal of scrap tires, batteries and waste oil in landfills after January 1, 1995, and requires each county to develop an infrastructure for accepting, storing, recycling or safe disposal of these materials by the end of 1994. The Loudon County regional plan addresses these requirements as follows:

a). Household Hazardous Waste

Loudon County will co-sponsor with the state of Tennessee a household hazardous waste collection day on June 3, 1995. Loudon County will work with Santek Environmental Services and the Beautification Board to develop the public education aspect of the project. The site selected for the collection day is the Matlock Bend Landfill. The education will begin in the winter of 1994 through education of adults and students. In addition to safe management, the public will be taught about safe substitutes for household hazardous waste. Loudon County will provide local volunteers to assist in the collection by providing traffic control and local emergency response. The costs to Loudon County should be for education, promotional services and emergency services (most of the expenses will be in the form of in-kind services). Loudon County has submitted a grant proposal to the state in 1995 for the state to cover the collection and disposal costs of the program.

b). Waste Tires

Waste tires generated in Loudon County are and will continue to be collected at the Matlock Bend landfill. The permitted storage area

has been constructed at the landfill. Currently, approximately 350 tons of tires are received at the landfill each year. The tires are stored in a transfer trailer according the state permit requirements. The tires are transported to Atlanta for recycling. Santek Environmental Services is responsible for market development or disposal of the tires.

c). Waste Oil

A portion of the waste oil generated in Loudon County is currently being handled by the private sector. However, to increase the proper disposal of waste oil and other automotive fluids, a station with a 300 gallon tank to receive waste automotive products will be built at the landfill by January 1, 1995. Santek will contract with a private oil company to transport and recycle the used automotive fluids. Santek will monitor the station to ensure the safety of the public and the environment.

d). Automotive Batteries

Lead acid batteries are being collected by the private sector. Residents can also drop-off lead acid batteries at the convenience center or at the Matlock Bend landfill. The station for waste oil that will be constructed at the landfill will also have a storage area for lead acid batteries.

e). Litter

Loudon County has a litter prevention program that is funded by a state litter grant of approximately \$20,000 annually. The grant

manager is Ann Hammontree of the Loudon County Beautification Board. The program utilizes prisoners to collect litter along the roadside. Complaints about unauthorized dump sites are also investigated by local law enforcement agencies.

H. IMPLEMENTATION SCHEDULE

- 1. Based on the implementation schedules and milestones developed for each plan element described in Chapter V through X, and parts C and D of this chapter, the following composite implementation schedule is submitted with milestones for the 10-year period, 1994 through 2003.
- 1994 1. Contract approval and implementation of Phase 2 and 4 of Matlock Bend landfill.
 - 2. Approval by LCSWDC and Loudon County Commission of the 10-Year Solid Waste Management Plan.
 - 3. Submission of the Plan to the State Planning Office, and the Office of Solid Waste Assistance.
 - 4. Expansion of County recycling center.
 - 5. Development of tire recycling program.
- 1995 1. Implementation of a household hazardous waste collection program.
 - 2. Development of composting, waste oil collection, and lead acid battery programs at the landfill.

I. ESTIMATED TEN-YEAR SYSTEM COSTS *

The estimated ten-year costs of the system are as follows:

	
1. Contract with Santek for disposal and other waste	
reduction activities at the landfill (Expenses are based on	
the fee schedule of the ten-year disposal contract, and	
Table VIII-1(b)).	
Operating cost 490,291 tons x \$30.40	
13,650 tons x \$27.21	
341 tons x \$27.54	\$15,285,654
State Surcharge 504,282 tons x \$.85	\$428,640
2. Convenience center	\$600,000
(\$60,000 x 10 years)	
3. Recycling stations at landfill	\$50,000
(\$5,000 x 10 years)	
4. Class IV and recycling processing	cost
(operated by private sector)	unknown
Total	\$16,364,294

^{*}NOTE: This figure understates the total cost because it is not adjusted for inflation.

J. ALLOCATION OF RESPONSIBILITIES

Loudon County is a one-county region. The full responsibility for implementation resides with the LCSWDC and the County Commission. The regional plan has been formally adopted by resolution of the regional administrative board (the Loudon County Solid Waste Disposal

Commission) and signed by its Chair. The plan has also been adopted by the Loudon County Commission, to acknowledge the county's commitment to support the plan and to assure that the municipal solid waste region has complied with T.C.A. 13-3-105 and/or 13-4-104. A copy of the minutes of the county commission meeting indicating that this draft municipal solid waste plan has been submitted to the county commission for review, comment, and adoption before it was submitted to the State Planning Office is included in Appendix E.

PART II

LOUDON COUNTY SOLID WASTE PLAN

LOUDON COUNTY REGIONAL SOLID WASTE MANAGEMENT PLAN

Introduction:

The Solid Waste Management Act of 1991 requires 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 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 may 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 data collected in the District Needs Assessment was updated and revised according to significant changes in waste generation and management capacity for the planning period, which was not projected in the Assessment.

The base year of the plan is 1993, and the planning horizon is 1995—2004. The plan consists of three parts: (1) an Executive Summary; (2) a detailed plan; and (3) Appendices. The plan will be submitted to the State Planning Office no sooner than July 1, 1994, after public hearings have been conducted in Loudon County.

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

DESCRIPTION OF THE

MUNICIPAL SOLID WASTE REGION

A. GENERAL DESCRIPTION:

Loudon County is a single county region with a population of 32,132 and an area of 228.6 square miles. Loudon County is bordered on the north by Knox County, the west by Roane County, the south by Monroe County and the east by Blount County. The Tennessee River and I-75 run from the north to the south end of Loudon County (see Loudon County base map at the end of this chapter). According to population projections compiled by the Sociology Department of the University of Tennessee, Loudon County's population will increase 9.6 percent between 1990 and 2000. TVA figures project a more rapid growth due to residential expansion of the Tellico Village community. The solid waste plan takes into account these estimated demographic changes in population.

B. RATIONALE FOR REGION FORMATION:

Loudon County is a single county region. Under T.C.A. Sections 68-31-815(b)(12), 68-31-813(a)-(e) and 68-31-814(b)(1) and (15)], Loudon County must state specific reasons why it failed to adopt a multi-county option. The reasons are as follows: (1) Loudon County wishes to retain control over its waste stream; (2) Loudon County has the resources to meet its waste reduction goals and landfill capacity assurances without the need for agreements with neighboring counties; (3) A single county region was deemed the most cost-effective and environmentally-sound

strategy for Loudon County to adopt and (4) The East Tennessee Development District recommended a single county region in the district needs assessment for Loudon County.

C. INSTITUTIONAL STRUCTURE:

In March 1993, Loudon County established the seven member Loudon County Solid Waste Disposal Commission (LCSWDC). Five members were appointed by the County Executive and approved by the County Commission, and one member each was appointed by the Mayors of the cities of Lenoir City and Loudon, and approved by the respective City Councils.

The purpose of the LCSWDC is to:

- 1. Provide procurement and overall supervision of the landfill in terms of establishing policies and procedures, setting tip fees, contracting for and supervising operations, and
- 2. Develop and implement a ten-year solid waste management plan in accordance with T.C.A. 68-211-801 et seq.

The LCSWDC is authorized under an intergovernmental agreement between the City of Lenoir City, County of Loudon, and the City of Loudon, made in September 1983 and amended in June 1987 and March 1993. The LCSWDC has several times by way of announcements in meetings and in local papers requested volunteers for a citizens advisory council. To date, advisors include local experts from CTAS, MTAS, the East Tennessee Development District, TVA, and Keep America Beautiful. The public is invited to all meetings and workshops of the LCSWDC. Meetings are publicly announced and held at least once a month. Five public workshops have been held from December 1993 until August 1994 about the solid waste plan and the solid waste disposal contract.

CHAPTER I: FORMS

A. REGIONAL SUMMARY: DEMOGRAPHICS (1993)

- 1. Name of Region Loudon County
- 2. Regional Population 32,132 (1993 Census adjusted)
- 3. Regional Area 228.6 square miles
- 4. Population and Population Density: (Table I-1).

Table I-1

	Deliko	rapines	
Loudon County	Area (Sq. Miles)	Population	Avg. Density Population/sq.miles
Regional Total	228.6	32,132	141
			<u>.i</u>

Source: 1990 Census (adjusted)

5. Distribution of the Total Regional Population, by urban and rural areas:

Table I-2

	Ur	ban		Rural		
Loudon County	Population	8	Population	9		
Regional Total	10,732	33.4	21,400	66.6		

Source: 1990 Census (adjusted)

6. Distribution of the Total Regional Population by Sex and Age

Table I-3
Population by Age and Sex

Age	Total	Male	8	Female	ક
0 – 4	2,028	1,028	50.7	1000	49.3
5 – 17	5,581	2,913	52.2	2,668	47.8
18 – 44	12,576	6,236	49.6	6,340	50.4
45 – 64	7,194	3,453	48.0	3,740	52.0
65+	4,753	1,858	39.1	2,896	60.9
Regional Total	32,132	15,488	48.2	16,644	51.8

Source: 1990 Census (adjusted)

7. Distribution of Regional Population by Education (Age > 25)

Table I-4
Population by Education

Loudon County	Number	ક
Less than 9th Grade	6,138	19.1
9th-12th grade, no diploma	5,495	17.1
High School Graduate	10,636	33.1
College (1-4)	8,931	27.8
Post Graduate/Professional (>4)	932	2.9
Regional Total	32,132	100.0

Source: 1990 Census (adjusted)

- 8. Total Number of Households in Region 12,155 (1990)
- 9. Distribution by Type of Housing and Occupancy

Table I-5 Population by Housing and Occupancy

	FORMIALION BY	Housing and Oc	Cupancy	
Loudon County	Total Units	Occupied	Owner	Ponto
Single Family	·		OWING.	Rented
1, Detached	25,313	10,300	9 601	
1, Attached	314	138	8,681 75	1,619
Multi-Family			/3	63
2	415	405	_ 10	395
3 – 4	424	415	9	406
5 – 9	421	205	7	
10 – 19	432	211	4	198
20 – 49	26	25	0	207
50 or more	00	0	0	25
Institutional	329	NA	NA	0
Mobile Home/Trailer	4,321	1,668	1,262	NA 106
Other	137	109	67	406
Regional Total	32,132		0/	42

Source: 1990 Census

10. Regional Population Projections 1994 - 2003

Table I-6
Regional Population 1993: 32,132

		Cha	nge
Year	Projected Population	Number	8
1993 (base yr)	32,132		
1994	32,428	296	0.9
1995	32,728	300	0.9
1996	33,030	302	0.9
1997	33,335	305	0.9
1998	33,643	308	0.9
1999	33,954	311	0.9
2000	34,264	310	0.9
2001	34,503	239	0.7
2002	34,744	241	0.7
2003	34,987	243	0.7

Source: University of Tennessee, Department of Sociology

According to the population projections compiled by the University of Tennessee, Department of Sociology, Loudon County's population will increase 9.6% between 1990 and 2000. However, ETDD feels this may be a conservative figure due to the large residential growth around Tellico Lake and in the planned community,

"Tellico Village." It is anticipated that the municipalities of Loudon and Philadelphia will continue to decline in population during the next two decades unless major annexations occur. This decline is due to the limited amount of new construction and an overall decline in household size. The municipalities

of Greenback and Lenoir City are expected to experience modest growths in the next two decades.

Waste generation projections predict a sizeable increase over the next 10 years in Loudon County. Major emphasis will need to be placed on adequate County collection and disposal services as a result of significant population increases outside the municipalities.

B. Economic Activity

Basic economic information, for each county, and the region in 1991.

Table I-7
Economic Activity (1991)

Loudon County	Population	MSA County	Total	Total	Per	Population Below the
Councy	FORMACION	(yes/no)	Employment	Earnings	Capita Income	Poverty Line
Regional Total	32,132	No	12,310	433,473,000	3,832	13.6

Source: Loudon County Solid Waste Needs Assessment, 1992.

Table I-8
% of Total Employment

Loudon County	Regional Total	ક
Manufacturing	3,478	32.1
Construction	684	6.3
Trade	1,833	16.9
Finance	655	6.0
Service	2,252	20.8
Government	1,313	12.1
Transportation Public Utilities	529	4.9

Source: Loudon County Solid Waste Needs Assessment, 1992.

Table I-9
Agricultural Employees

Loudon County	Employment
Regional Total	1,468

Source: Loudon County Solid Waste Needs Assessment, 1992.

4.Regional summary of major generators of commercial and non-hazardous industrial waste in 1991. The major generators for 1991 were as follows:

City of Loudon 2,800 tons

Lenoir City 5,700 tons

Loudon County 4,000 tons

Volunteer Refuse 19,800 tons

Tennessee Waste Movers 6,000 tons

Kimberly Clark 36,000 tons

Metal Resources 30,000 tons

Other 4,700 tons

Total 109,000 tons

Major Generators of Solid Waste In Loudon County, 1991

Table I-10

Loudon County	Screening Criteria Applied	Number of Generators	Estimated Total Quantity of	
			Waste	
Regional Total	>2,500 TPY	. 8	109,000 TPY	

Source: LCSWDC files, Year-end 1993.

5. Regional summary of institutions housing more than 100 persons.

Table I--11
Institutions Housing More Than 100 Persons, 1991

Loudon	Total Number	Total Number of	Estimated Quantity of Waste Generated
County	of Institutions	Residents	
Regional Total	NONE		

6.Summary data on major health care facilities (larger than 50 beds), (hospitals, nursing homes) in the region.

Table I-12

Major Health Care Facilities (1991 Generation)

			Infectious Waste Management		
Loudon	No. of	No. of			Est. Quantity of
County	Facilities	Beds	On Site/Offsite	Type Treatment	Solid Waste Generated
Regional Total	3	346	off-site	incineration	416 TPY

Source: Loudon County Solid Waste Needs Assessment, 1992.

7. Sources of local revenue utilized in the region.

Table I-13
Sources of Local Revenue

Loudon County	Property Tax	Local Sales Tax	Wheel Tax	Iocal Waste Collection Fee*	Jser Fee/ Tipping	Other
Regional Total	+	+	0	+	Fee +	0

*Lenoir City has a waste collection fee

Source: Loudon County Needs Assessment, 1992

8. Revenue data for fiscal 1993.

Table I-14

Loudon County	Total Assessed Property Value	Total Property Tax Revenue	Total Sales Subject to Sales Tax	Total Local Sales Tax Revenue	Total Wheel Tax Revenue
Regional Total	311,894,684	8,336,198	177,454,636	2,440,867	0

Source: Loudon County Trustee, 1993

CHAPTER II.

ANALYSIS OF THE CURRENT SOLID WASTE

MANAGEMENT SYSTEM FOR THE REGION

Statutory Requirements:

"...(E)ach plan submitted by a municipal solid waste region shall include the following:...(2) a current system analysis of: (A) waste streams, including data concerning types and amounts generated; (B) collection capability, including data detailing the different types of collection systems and the populations and areas which receive and do not receive such services; (C) disposal capability, including an analysis of the remaining life expectancy of landfills or other disposal facilities; (D) costs, using a full-cost accounting model developed by the State Planning Office; including costs of collection disposal, maintenance, contracts, and other costs; and (E) revenues, including cost reimbursement fees, appropriations, and other revenue sources." [T.C.A. Section 68-31-815 (b)(2)]

Supporting data for this chapter are displayed in the County Profiles, prepared for each county as a part of the District Needs Assessments (Chapters III, V, VI, VIII, and IX). Data had been updated according to changes in 1993 and projection for the planning period.

A. WASTE STREAM CHARACTERIZATION

Loudon County's waste stream differs from the national percentages in the following categories: yard waste & wood is less than national averages due to the more rural nature of the county (yard waste would be less and wood waste is most likely higher than the national percentages). Loudon County also has a large industrial base which contributes greatly to the waste stream. Metal Resources, Viskase and Kimberly-Clark are among the largest industries contributing the majority of the industrial waste stream to Loudon County's Landfill.

LOUDON COUNTY WASTE COMPOSITION ANALYSIS

A mail—out waste composition survey was conducted in the fall of 1993 by Santek Environmental Services of hauling customers of the Matlock Bend Sanitary Landfill. Data was aggregated and analyzed by Dr. Peggy Douglas, consultant to the Loudon County Solid Waste Disposal Commission. Haulers were asked to provide the loads and types of waste hauled during a given week for each generator. The survey was taken to determine the composition of the waste stream disposed of in a typical week in Loudon County. The analysis is admittedly limited in that the sample time period may not be representative of any given week of any given year. Also, some haulers did not respond to the survey. However, the analysis can be used in general to obtain insight into areas where commercial and residential waste reduction may be initiated.

The following table depicts the composition of the waste stream in Loudon County as estimated from the Waste Composition study:

TYPE OF WASTE	TONS IN 1993	% OF TOTAL WASTE
residential	12,500	10%
commercial	17,920	14%
institutional(schools, hospitals, etc.)	10,000	88
industrial(non-hazardous)	85,000	68%

The waste composition analysis shows the greatest potential for waste reduction in the commercial/industrial sector. Kimberly Clark has announced their intent to divert approximately 200 tons per day of their waste disposed of at the Matlock Bend (Loudon County) landfill as of April 1995. A Loudon County Waste Reduction Taskforce which includes the Loudon County Chamber of Commerce and the Tennessee Valley Authority is currently being organized to work with other large commercial/industrial generators. The taskforce will also determine how recycling programs for residential customers can be expanded.

B. WASTE COLLECTION AND TRANSPORTATION SYSTEMS

Loudon County provides one convenience center in Loudon for residential refuse collection. The City of Loudon, Lenoir City, and the Tellico Village Property Owners Association (TVPOA) provide public collection services. No municipalities in the county contract with a private company to provide collection services. The following private companies provide collection services by contracting directly with householders or businesses:

COMPANY	No. of Households	No. of Businesses
V&R Garbage Service	200 (known)	1
Browning Ferris Industries	283 (known)	65

The following collection services are available in the county:

TYPE	NUMBER OF HOUSEHOLDS
Convenience Centers	5,000
Public House-to-House Pickup	4,585
"Green Box" Drop	0
Known Contracted Private Service	823
No Service or Unknown Service	1,754

C. SOURCE REDUCTION AND RECYCLING SYSTEMS

RECYCLING COLLECTION SERVICES AND PROGRAMS

Keep America Beautiful of Loudon County (Loudon County Beautification Board) sponsors a drop—off recycling center at the convenience center in the City of Loudon. The contact person is Ann Hammontree, Loudon County Beautification Board, P. O. Box 246, Loudon, TN 37774. Telephone: (615) 458—4470. The site is attended by Jackie Wallace and Jim Rogers. Operating hours are Sunday—Saturday 8:00—6:00 p.m. In 1993, the volume of recyclables collected at the center was 116 tons. Materials collected were newsprint and aluminum cans.

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

1. Recycling Processing

A recycling processing facility is owned and operated by Tennessee Waste Movers, Inc. in Lenoir City. The owner/operator is Sandy Gillman, 12816 Peachview Drive, Lenoir City, TN. The recyclables are co-collected with refuse. At the facility, refuse is dumped onto a concrete floor, where a skid loader scoops up and places on conveyor belt. Recyclables are "picked" out of refuse.

2. Composting

The Cities of Loudon and Lenoir City collect and compost residential yard waste. There are no other composting facilities at this time; however, Santek Environmental Services has proposed to compost yard waste at the landfill starting in 1995. The total volume of yard waste landfilled in 1993 was 10,000 tons. Additionally, the City of Loudon has obtained a permit by rule to contract and operate a municipal solid waste/sludge composting operation in Loudon County.

3. Transfer Station

The Loudon County Transfer Station is located at Rock Quarry Road. The operators are Jackie Wallace and Jim Rogers at (615) 458-9030. At the facility, the county dump trucks bring solid waste to the transfer station and load it in 40 cubic yard compactor that are hauled to the landfill for disposal. Individual households also bring waste and place in four 8 cubic yard dumpsters. The County hauls waste from the transfer station to the landfill for disposal. The current throughput rate is approximately 10 tons per day.

4. Waste to Energy/Incineration

Loudon County does not currently have any waste—to—energy facilities. There are no plans for public facilities in the next ten years. Kimberly Clark has notified the LCSWDC that the company will build an on—site waste—to—energy facility to utilize waste from paper manufacturing. The estimated throughput is 200 tons per day, and the facility is anticipated to begin operations in April 1995.

E. DISPOSAL FACILITIES - LANDFILLS AND BALEFILLS

The Loudon County Class I Disposal Facility is the Matlock Bend Landfill, State Highway 72, 1.3 miles northwest of I-75 interchange in Loudon (Permit Number SNL 53-103-0203; Issued 1985). The owner is the Loudon County Solid Waste Disposal Commission (LCSWDC) and the operator is Santek Environmental Services, Inc., 1306 S. Lee Highway, Cleveland, TN 37311. Telephone: (615) 458-2651. The operating hours are: Monday through Friday 7:30 am until 3:00 pm and Saturday 7:30 am until 12:00 pm.

The landfill serves Loudon County residential and commercial/industrial customers. In addition to residential and commercial refuse and industrial waste, the facility also accepts the following:

- 1. Land clearing wastes, brush leaves, and grass trimmings (10,000 tpy)
- 2. Demolition waste (4,263 tpy)
- 3. Special wastes including asbestos from Viskase; and sandblasting waste from TVA (3,000 tpy); and Kimberly Clark sludge from paper manufacturing (74,000tpy).
- 4. Scrap tires (350 tpy)

F. COSTS OF THE CURRENT SYSTEM

FY 93 Annual solid waste expenditures by the public sector in Loudon County are reported below:

	CITY OF LOUDON	LENOIR CITY	TOUDON GOVERN
Equipment	43,107	5,500	LOUDON COUNTY
Collection Personnel and Operations	112,371	114,259	0
Disposal	60,996	80,961	140,000
Convenience Center	0	0	40,000
Total	216,444	245,760	180,000

Average cost/ton (tipping fee) to dispose of MSW at the landfill in 1991 \$20.00

Average cost/ton (tipping fee) to dispose of MSW at the landfill in 1994 \$27.50

Source: Financial Departments of Cities of Loudon and Lenoir City, and Loudon County.

G. REVENUES

Solid waste collection, transportation, recycling and disposal costs for Lenoir City, the City of Loudon, and Loudon County are funded by appropriation from the general fund into a special fund for solid waste services. Lenoir City charges residents a monthly collection fee.

H. PUBLIC INFORMATION AND EDUCATION PROGRAMS

The Loudon County Beautification Board provides in-service training to Loudon Schools. In elementary schools, aluminum cans are recycled (proceeds used for school programs). The coordinator of the recycling activities is Ann Hammontree of the Loudon County Keep America Beautiful Chapter (KAB) P.O. Box 246, Loudon, TN 37774. Phone: (615) 458-4470. The recycling education curriculum used for children K-12 is KAB's Waste in Place.

The KAB holds monthly workshops on environment, dogwood festival, etc. for adults. The adult population is also offered education through town meetings and the LCSWDC workshops.

I. PROBLEM WASTES

In 1994, Santek Environmental Services, operator of the Matlock Bend Landfill will be constructing a tire collection, processing, and storage center at the landfill. Waste oil collection will be offered at the landfill when the site is approved to accept the waste. The Loudon County Solid Waste Disposal Commission will be sponsoring a taskforce to design an education program for the collection of household hazardous waste and will be making application to the state to provide for a household hazardous waste collection event to be held annually. Details of the problem waste management plan are specified in Chapter X.

J. SYSTEM MAP FOR BASE YEAR (1993)

A map showing the solid waste system in Loudon County is presented at the end of this Chapter. Components of the system include:

- 1. current and future convenience center sites;
- collection service areas;
- transfer station;
- current and future recycling collection sites;
- 5. transportation routes;
- processing facilities sites;
- 7. future composting facility site;
- 8. landfills, and balefill sites;
- 9. educational program sites (e.g., schools)

K. STRENGTHS AND WEAKNESSES OF EXISTING SYSTEM

The major strength of the system is the infrastructure that is already in place. A large amount of waste reduction is already being realized by major industries in Loudon County. Lenoir City and the City of Loudon have established yard waste composting programs. Approximately ninety percent of the residences

are served by private or public refuse collection systems. The county has a transfer station, a recycling center. The LCSWDC has a contract for the development and operation of the Matlock Bend Landfill for the next ten years. The City of Loudon has a permit to build a MSW Composting facility. The issue facing Loudon County is how to expand the existing infrastructure in a cost-effective and environmentally—sound manner.

CHAPTER II: FORMS

A. REGIONAL SUMMARY: WASTE STREAM COMPOSITION

1. Quantity of waste received for disposal in Calendar year 1991:

Table Ⅱ-1

County	Tons disposed	1991 Population	Tons per capita
Loudon	107,454	31,547	3.41
Source: LCSWDC 64105	1004		<u>.l.</u> .

Source: LCSWDC files, 1994.

2. Origin of Solid Waste in 1991: (Reported quantities are estimated).

Table II-2

Source	Quantity Tons/Year	% of Total
Residential	16,118	15%
Commercial/ Institutional	32,236	30%
Non-hazardous Industrial	58,681	54%
Special**	1,075	1%
Other		

Source: Data provided by Santek Environmental Services, 1994.

3. Acceptance of Certain Categories of Solid Waste for Disposal:
Quantities of the following materials, that could be recycled, composted, or
diverted to a Class III Landfill (yard wastes) or a Class IV Landfill
(construction and demolition wastes) were received for disposal in a Class I
(municipal solid waste) landfill, or permitted incinerator in 1991. Quantities
are reported in tons/year.

Table II-3

	Yard Waste (clippings, leaves, grass)	Sewage Sludge	Construction Demolition	Tires	White Goods *
Facility	Qty	Qty	Qty	Qty	Qty
Loudon County Landfill- Matlock Bend	10,000	5,400	4,263	350	350

^{* &}quot;white goods" - discarded major appliances such as washing machines, dryers, refrigerators, etc.

4. Description of the Waste Stream by Materials:

Table II-4
Loudon County Municipal Solid Waste Disposed of in 1993

Generator	Major Type of Waste	Tonnage landfilled in 1993
Kimberly Clark	paper sludge	75,150
Metal Resources	furnace slag	7,200
Volunteer Refuse	res/comm/ind. hauler	16,770
Lenoir City	residential	5,800
City of Loudon	residential/commercial	3,100
Loudon County	residential	2,150
TN Waste Movers	residential	2,500
Other	commercial/industrial	12,750
Total		125,420

Source: LCSWDC files.

5. Unmanaged Solid Waste **

Calculate potential maximum solid waste generation, by county, according to the following:

Municipal Solid 1991 pounds/person/day*
Waste (tons/year) = population x per capita generation x 365 days/year
2,000 lbs/ton

^{*} using the figure 6 lbs./person/day reported by UT Report.

Table II-5

Potential Waste Generation 1991 tpy	Actual Waste Disposed 1991 tpy	Unmanaged Waste 1991 (potential— actual) tpy	Percent of Potential Total
34,544	107,454	72,9 10	211%

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

REGIONAL SUMMARY: FACILITIES

6. Composting Facilities

Table II-6
Operating and Planned Composting Facilities in the Region

•				Composted Materials		
	Loudon County	Facility Location	Tons of Waste Processed	Yard Waste	Sewage Sludge	Solid Waste
Existing:	Cities of Loudon and Lenoir City	Cities of Loudon and Lenoir City	unknown	unknown	0	0
Planned:						

7. Municipal Solid Waste Incinerators or Waste-to-Energy Facilities in the Region

Table II-7

Operating Facilities

Loudon County	Facility Location	Design Capacity tons/year	Current Use tons/year	Anticipated Operating Life of Facility
Viskase	on site			

Planned Facilities

Loudon County	Facility Location	Design Capacity tons/day	Current Use tons/year	Anticipated Operating Life of Facility
Kimberly Clark	on site	200	N/A	

8. Existing Municipal Solid Waste Landfills in the Region, July 1994.

Table II-8

Loudon County	Name of Landfill	Location	Permitted Capacity (Acres)	Current Rate of Waste Accepted (tons/day)	Remaining Capacity (cu.yds)
Total	Matlock Bend (Phases 1, 2 3, and 4) *	Loudon County	61.6	450**	1,575,000***

* Phase 1 27.5 acres (Class I)
Phase 2 17.5 acres (Class I)
Phase 3 5.5 acres (Class III)
Phase 4 11.1 acres (Class I)

^{**} Source: 1994 estimate, Santek Environmental Services July 1994.

^{***} Estimate as of July 26, 1994, Santek Environmental Services, with modification to MCI plan.

9. Existing Landfills Expected to Close Before 2003

Table II-9

Loudon County	Location	Current Use (Tons/Day)	Current Annual Use (Tons/Year)	Anticipated Date of Closure
Total	Matlock Bend Phase 1)	450	125,000	September 1994

Source: Santek Environmental Services, March 1994.

10. Planned Expansions and Planned New Facilities Which Will Operate for Ten Years or More

Table II-10

Region	Propo Facil		When Will	Permitted	Design Rate of Waste	Potential
	Expan.	New	Capacity be Available	Capacity (acre)	(tpd) Disposed	Expansion Yes/No
Loudon County	Matlock Bend Phase 2,3,4		October 1994	34.1	160	yes
	New 1 Capacity 3 cubic yar					

Source: Santek Environmental Services, February 1994.

11. Total Existing and Planned Capacity in the Region at the Close of the Next Ten Years

Table II-11

	CUBIC YARDS				
Year	Existing	Planned*	Total		
FY 1994	187,500	1,575,000	1,160,148		
FY 1995	1,501,873	73,127	1,575,000		
FY 1996	1,203,322	73,127	1,429,474		
FY 1997	1,074,184	73,127	1,193,707		
FY 1998	1,074,184	0	1,074,184		
FY 1999	953,478	0	953,478		
FY 2000	813,577	0	813,577		
FY 2001	708,467	0	708,467		
FY 2002	583,668	0	583,668		
FY 2003	458,117	0	458,117		
FY 2004	204,505	0	204,505		

^{*} REMAINING CAPACITY AT MATLOCK BEND LANDFILL AS OF 1/31/94

PHASE I 187,500 CY PHASE II & IV modified PHASE III 73,127 CY

Source: Estimates based on proposed Phase II modified Landfill Design of 1984 MCI plan—Santek Environmental Services.

GROWTH TRENDS, WASTE PROJECTIONS
AND PRELIMINARY SYSTEM STRUCTURE

Statutory Requirements

"...(E)ach plan submitted by a municipal solid waste region shall include... anticipated growth trends for the next ten—(10) year period...and anticipated waste capacity needs." [T.C.A. Section 68—31—815(b)(4) and (5)]

In this chapter, growth trends and waste generation will be projected over the ten-year planning period (1994-2003). In defining regional solid waste management demand, the planning region used the same methodology and reporting format used by the District Needs Assessment. The regional plan shows the possible components of an integrated waste management system will be considered in the plan.

A. Growth trends and waste projections reported in the Loudon County Solid Waste Needs Assessment were reviewed, revised, and extended in Tables III-1 through III-4. Waste projections were revised based on events and plans made in 1993.

B. The projected 10-year demand for solid waste services is less than the current supply and planned additions to the current system.

C. PRELIMINARY SYSTEM DESIGN

The elements that will be included in a comprehensive waste management system include: source reduction and education, commercial waste reduction, residential recycling, yard waste composting, Class I disposal, tire recycling, and special and household hazardous waste management. The percentage of waste handled by each component is:

Industrial waste reduction (Kimberly Clark and Metal Resources)		
Residential source reduction and recycling	1	
Yard waste composting	7	
Class I landfill	41 %	

CHAPTER III: FORMS

1. The following Table summarizes calculations of annual <u>per capita</u> solid waste generation rates for Loudon County.

Table III-1

Loudon County	Total Waste Disposed in FY 1993	Projected Population 1993	Annual Per Capita Generation Tons/Person/Year
Total	125,600*	32,132	3.9

*Source: LCSWDC files, March 1994.

2. Table III-2 summarizes the projected quantity of solid waste requiring disposal (base on a generation rate of 3.91 times the annual population) in the region in each projected year, adjusted for population changes.

Table III-2

Quantity of Solid Waste Requiring Disposal (tons)*

Loudon County	Total	Loudon County	Total
1994	126,794	1999	132,760
1995	127,967	2000	133,972
1996	129,147	2001	134,906
1997	130,340	2002	135,851
1998	131,544	2003	136,800

^{*} Based on population projections from Table I-7 and a waste generation rate of 3.91 tons/person/year.

3. Table III—3 summarizes the projected quantity of solid waste requiring disposal in the region 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*

Loudon County	Total	Loudon County	Total
1994	130,851	1999	137,008
1995	132,062	2000	138,259
1996	133,280	2001	139,223
1997	134,510	2002	140,198
1998	135,753		

^{*} Projections based on an annual economic growth rate of 3.2 percent. Source: UT Center for Business and Economic Research estimates of Gross State product growth between 1990 and 1999.

4. Table III-4 summarizes the projected quantities of solid waste requiring disposal (= generation) 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*

Loudon County	Total	Loudon County	Total.
1994	116,851	1999	47,779
1995	68,591	2000	48,352
1996	46,410	2001	48,933
1997	46,655	2002	49,520
1998	47,213	2003	50,114

^{*} Waste Reduction estimates based on a 55,000 ton per year reduction by Kimberly Clark beginning April 1995 and residential and commercial recycling beginning January 1995.

5. Table III-5 summarizes projected waste after adjustments for regulatory factors, if any, displaying adjusted projections for each projection year. (Omit this Table if no regulatory credits were claimed by any county in the region.)

Table III-5 (optional)

- * OMITTED, No regulatory credits anticipated.
- 6. Table III-6 summarizes county adjustments for special factors, for each projection year.

Table III-6* (Optional)

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

- * OMITTED, No special factors claimed.
- 7. Table III-7 summarizes projected waste generation for each projection year, adjusting for all net imports or exports of wastes. (Omit the table if no exported or imported waste adjustments were made by any county in the region.)

Table III-7* (optional)

Annual Projections of Solid Waste Requiring Disposal Adjusted for Waste Imports or Exports (in tons/year)

* OMITTED, Estimates in Tables III (1-4) are net figures.

8. Table III—8 indicates projected quantities of solid waste which will require collection and disposal in each projection year, after adjustment for all applicable factors.

Table III-8* (Optional)

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

Loudon County	Total	Loudon County	Total
1994	116,851	1999	47,779
1995	68,591	2000	48,352
1996	46,410	2001	48,933
1997	46,655	2002	49,520
1998	47,213	2003	50,114

CHAPTER IV
WASTE REDUCTION

Statutory Requirements:

"The goal of the state is to reduce by twenty-five percent (25%) the amount of solid waste disposed of at municipal solid waste disposal facilities and incinerators, measured on a per capita basis within Tennessee by weight, by December 31, 1995." [T.C.A. Section 68-31-861(a)]

"...[E]ach plan submitted by a municipal solid waste region shall include...a description of waste reduction activities designed to attain the twenty-five percent (25%) reduction required by Section 25(a) [T.C.A. Section 68-31-861(a)]; and Section 14(b)10. [T.C.A. Section 68-31-815(b) (10)].

"A county or region shall have the flexibility to design its own plan and methods which take into account local conditions for attaining the waste reduction goal set by this section. This plan shall be included as a part of the county or regional plan required by Section 13 of this act." [T.C.A. Section 68–31–861(f)]

A. BASE YEAR QUANTITY

The population and quantity of solid waste generated and disposed of in calendar 1989 for Loudon County were 31,500 and 67,910, respectively. Thus the waste generated and disposed of per capita was 2.16 tons per capita per year. This figure was the actual disposal amount reported by Santek Environmental Services operator of the Matlock Bend Landfill. It should be noted that the UT study estimated a waste generation 26,508 tons per year. For planning purposes, Loudon County will use the actual disposal figure reported by Santek and not the UT estimate.

Since the UT estimated quantity of waste managed in 1989 for any county in the region has been demonstrated to be in error, proof of the actual base figure is submitted at the end of this chapter in accordance with T.C.A. Section 68-31-861(a)

and (b). Copies of the error documentation for Loudon is included in Appendix B. Table IV-1. reflects the adjusted quantity.

B. TARGET 1995 WASTE REDUCTION PER CAPITA DISPOSAL ROLE

Using 1989 as a base year, the quantity of waste in tons, that must be reduced at the source, or diverted to alternative treatment options, if the region is to meet the statutory goal by December 31, 1995, is 17,673 tons per year. This figure was derived by using the following formula (1989 per capita disposal rate \times .25 \times 1995 population = 2.16 \times .25 \times 32,728 = 17,673 tons).

C. THIS SECTION WILL DESCRIBE HOW THE REGION WILL MEET THE STATEWIDE WASTE REDUCTION GOAL.

Waste Generation

Waste generation in Loudon County has fluctuated significantly since the 1989 Base Year. To understand how Loudon County expects to meet the 1995 waste reduction goal of 17,673 tons per year, the fluctuations in waste disposal since 1989 are presented for analysis:

YEAR	LANDFILL DISPOSAL VOLUME
1989	67,910
1990	73,511
1991	106,798
1992	96,730
1993	125,732
1994 (EST)	122,850
1995 (EST)	68,591

The large increase in 1991 was due to an increase in industrial MSW (Kimberly Clark and others) disposed of at Matlock Bend Landfill. The reduction in 1992 was a result of Metal Resources's decision to divert 100 Tons per day to an out—of state facility. Shortly after Metal Resources waste diversion measure, Kimberly Clark began doubling their generation rates due to an expansion of the facility. The estimated reduction in 1994 and 1995 is primarily due to a 200 ton/day anticipated industrial disposal reduction to begin in April 1995. Additional reduction is expected through other industries and residential recycling and yard waste composting. Using a base year of 1989, the target per capita waste reduction will not be met due to the expansion of industry waste generation in Loudon County. However, due to major waste reduction efforts in 1995, the anticipated 1995 landfill disposal quantity is projected to be 86 percent less than the quantity disposed of in 1993. Waste reduction efforts will be explained in Chapter IV.

CHAPTER IV: FORMS

Table IV-1

Population and Quantities of Waste Disposed of at Municipal Solid Waste Disposal Facilities and Incineration, in 1989

Loudon County	1989 Population	1989 Total Waste Disposed (tons)	
Regional Total	31,500	67,910	

Source: Loudon County Solid Waste Needs Assessment, 1992.

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

Year	Previous Reductions	Recovered & Recycled	Diverted to Alternative Disposal	Other e	Total
1985 to 1989	unknown				
1990	1,486				1,486
1991	1,486	1,660	·		3,146
1992	3,146	1,826	10,068		15,04
1993	15,040	2,000	10,000		18,04
1994	18,040	2,208	13,600		33,848
1995	33,848	2,429	41,000	5,00	91,27
1996	91,277	2,672	55,000	5,00	0 153,94
1997	153,949	2,939	55,000	5,00	216,88
1998	216,888	3,233	55,000	5,00	280,12
1999	280,121	3,556	55,000	5,00	0 343,67
2000	343,677	3,912	55,000	5,000	407,58
2001	407,589	4,303	55,000	5,000	471,89
2002	471,892	4,733	55,000	5,000	536,62
2003	536,625	5,207	55,000	5,000	601,82
Total		40,686	514,668	45,00	0

Source: Discussions between LCSWDC, Santek, and the Loudon County Beautification Board at public meetings 1994-1995.

CHAPTER V

WASTE COLLECTION AND TRANSPORTATION

Statutory Requirements:

"...[E]ach plan submitted by a municipal solid waste region shall include...collection capability, including data detailing the different types of collection systems and the population and areas which receive and do not receive such services..." [T.C.A. 68-31-815(b)(2)(B); and "...as part of the local plan required by Section 13 of the Act, each county or multi-county municipal solid waste disposal region shall submit a plan for the adequate provision of collection services to the State Planning Office. Such plan shall identify unmet needs and shall be updated annually." [T.C.A. 68-31-851(b)

<u>Introduction</u>: In this section, the existing regional collection system (as described in Chapter II) will be compared to the standards established by the state convenience center rule for number, location and design of collection facilities (convenience centers) [T.C.A. 68-31-851(b)]. Total regional needs to provide adequate service to all residents and to meet this standard will be

identified. The plan for how the region will meet identified needs within 10 years will be described.

Existing System: There are approximately 12,645 households in Loudon County. Currently, the City of Loudon and Lenoir City collect refuse from 4,585 households. Thus, 8,060 (12,645-4,585) households are not served by public curbside collection services. The Tennessee Law requires Counties to ensure that 90 percent of their households have adequate collection service through one of the following scenarios: (1) one convenience center per 5000 households unserved by public curbside collection, (2) the county could contract with private haulers to ensure that 90 percent of the households are served, or (3) if the county and the private sector are currently serving 90 percent of the households, then the county would not need formal agreements with the private haulers if the county passed a resolution saying that they would agree to provide services if the private haulers discontinued service.

Given the law, the LCSWDC has the following options to meet the minimum requirements of the law:

- 1. Add one additional convenience center.
- 2. Contract with all the private haulers in the county to ensure a 90 percent service rate.
- 3. Since the county already has one convenience center, only 3,060 households are unserved by the public sector. If it can be shown that the private sector is serving 1,795 households, then 90 percent of the residents would be served. According to the 1993 Loudon County Solid Waste Needs Assessment, 1306 households were known to be served by private collection service. The LCSWDC intends to implement a policy at the landfill by December 1994 to identify generators or residential and commercial MSW. In this manner, the LCSWDC will

be able to document the fact that 90 percent of Loudon County residents have access to public or private collection service.

Loudon County may choose to expand its convenience centers from one site located in the City of Loudon to two sites, with one additional site to be determined based on the needs of the county. Approximately 500 households would be expected to use the additional convenience center, generating an average of 11 tons of solid waste per day, however this center is not expected to add a significant number of residents not currently served by public or private collection.

If Loudon County builds a new center in accordance with the Tennessee Convenience Center Rules 1200-1-7-.10(3)(b). The system will utilize thirty three 6 cubic-yard green boxes and an existing front loader. In addition to the collection of refuse, the center will also offer recycling collection. The County expects to contract for the hauling of refuse to the landfill. Capital and operating expenses for the entire system are as estimated follows:

PROPOSED EXPANSION OF LOUDON COUNTY CONVENIENCE CENTERS

CAPITAL COSTS FOR ONE CENTER

Excavation \$10,000 (3/4 acre)

Culvert \$3,000

Rock (\$6/ton 10" base) \$11,800 (2000 tons)

Fence (\$5.50/lin.ft.) \$6,100 (1,100 ft.)

Gate \$500

Shelter \$2,500

Electrical \$500

Signage and landscaping \$1,500

Equipment*

33 Greenboxes for refuse \$16,500

Total for one center \$52,400

ANNUAL OPERATIONS COSTS FOR ONE CENTER

Debt Service for Capital expenditures (5-year life @ 5%)	\$12,000
Salaries and Benefits (1 FTE)	\$18,000
Materials	\$2,000
Total Convenience center	\$32,000
Other costs	
Transportation (12 miles)	\$6,000
Disposal (5 tpd @32/ton)	\$41,600
TOTAL FOR ONE CENTER	\$79,600
TOTAL ANNUAL TONNAGE	3000 TONS
TOTAL COST PER TON	\$26.63

^{*} No additional truck is assumed to be needed. If necessary, the cost would be approximately \$100,000. Recycling station equipment will be leased from hauler.

RECYCLING

Statutory Requirements:

"...[E]ach plan submitted by a municipal solid waste region shall include...a recycling plan, including a description of current public and private recycling efforts and planned efforts to enhance recycling within the county or region."

[T.C.A. 68-31-815(b)(7)]

and "Effective January 1, 1996, each county shall provide...one (1) or more sites for collection of recyclable materials..." [T.C.A. 68-31-863(a)]

"Each person or entity operating a collection site for recyclable materials shall annually report the quantities of recyclable materials collected, by type of material, to the region which shall then report...[this information]...to the State Planning Office." [T.C.A. 68-31-863(b)]

A. <u>Regional Needs:</u> The regional needs for recycling programs, facilities, and services, based on the analyses in Chapter II, and the preliminary regional goals set forth in Chapter III.C are as follows:

Currently, the county provides one recycling drop-off center for residential recycling. Aluminum beverage cans and newspaper are recovered. Drop-off recycling stations are also provided to residents by Tellico village. Additionally, aluminum cans are recovered in the public school system. Tennessee Waste Movers provides curbside collection service for refuse and recyclables in the northern part of the county. Several local businesses are recovering a significant amount of old corrugated cardboard, including Don P. Smith Chair Company, Ft. Sanders Medical Center, Monterrey Mushrooms, and Viskase. Monterrey Mushroom Co. also composts and sells its organic waste. Greenback Industries recovers waste oil and wood pallets. Ferrous and nonferrous scrap is recovered by Greenback Industries, Viskase, Yale Security.

B. Specific actions that Loudon County will take to expand and enhance recovery, reuse and recycling in the region are described below:

The waste reduction regional goals and objectives are to move toward the target waste reduction goal by 1995 by working with commercial and industrial generators to reduce the volume of waste required for disposal, composting yard waste at the Matlock Bend Landfill, and providing convenient drop-off recycling and household hazardous waste collection for residential generators.

Loudon County intends to expand the recycling collection by enlarging the County recycling center, and by including additional materials. If the County decides to implement one additional convenient center. This center will include a recycling station. The county is currently recovering only newsprint and aluminum cans. The Loudon County Solid Waste Disposal Commission (LCSWDC) and the Loudon County Keep America Beautiful Agency are developing a plan to expand the materials collected at the drop-off recycling centers to include cardboard and possibly mixed paper.

The LCSWDC has been working with the Loudon County Chamber of Commerce and the Regional Waste Management Department of the Tennessee Valley Authority to develop waste reduction plans with the major commercial/industrial generators in Loudon County. The Loudon County Disposal Commission is discussing with Santek Environmental Services a program to divert yard waste from the Class I landfill.

The rationale for the selection of the above mentioned waste reduction programs was to develop a cost-effective plan to achieve the greatest potential for waste diversion. The estimated amount of diversion that will be achieved from the above programs is as follows:

Kimberly Clark 200 TPD reduction of paper sludge

Metal Resources 100 TPD reduction of metal slag

Other Commercial 7 TPD reduction of corrugated cardboard, pallets,

and waste oil

Residential 2 TPD reduction of old newspaper, corrugated

cardboard, and aluminum

Yard Waste 33 TPD reduction of yard waste

Loudon County is a member of the Regional Marketing Cooperative of East Tennessee (RMCET). RMCET interacts with the Tennessee Office of Cooperative Marketing. Through these resources, Loudon County expects to pursue additional markets for recycled materials in the future. Loudon County will also work with regional industries such as Kimberly Clark and Bowater to expand the markets for mixed paper.

Loudon County is considering alternatives for developing a local government purchasing and procurement policy for recycled products. A plan for purchasing recycled paper and other products is targeted to be put into place by July 1996. The County intends to work with the Tennessee Office of Cooperative Marketing to develop sources for purchasing recycled materials.

The Loudon County Solid Waste Disposal Commission is working with the local Keep America Beautiful Chapter and the Citizens Solid Waste Advisory Committee to educate children and adults about source reduction and recycling, and to encourage broad participation. Details of the education program are described in Chapter IX.

Budget for Expanding the Loudon County Recycling Stations

If recycling stations are included in the expansion plan for convenience centers then the marginal costs for adding recycling to convenience center refuse collection is minimal. Existing labor can be used to monitor the recycling stations. The capital costs per center for adding recycling bins is estimated at less than \$2000. If old newsprint, old corrugated cardboard, and aluminum cans are collected, the net costs per ton (revenue—hauling costs—processing costs) are estimated at an additional \$20/ton. Waste oil collection at the landfill could be a break even service if a local recycler will supply and service a 300 gallon drum. The cost of adding mixed paper collection when markets are secured is estimated at \$30/ton.

Loudon County will be responsible for coordinating efforts with private sector and non-profit sector programs and collecting the required data on recycling and recovered materials and for submitting annual reports to the state. [T.C.A. 68-31-863(b) and 68-31-871(a), (b)].

The location of existing and planned recycling programs, services, and facilities that will constitute the regional infrastructure, on the composite system map to be prepared in Chapter XI.

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

Statutory Requirements:

Neither composting facilities, solid waste processing facilities, or incineration facilities are included in the statutory list of planning requirements. However, because these facilities are viable options which may be considered in designing an integrated, regional waste management system, the Director of the State Planning Office has determined that this information is relevant, and should be included in the regional plan.

"...[Each plan submitted by a municipal solid waste region shall include...any other information as the Director of the State Planning Office may deem relevant..." [T.C.A. 68-31-815(b)(15)]

A. Due to adequate landfill disposal capacity and waste reduction programs, Loudon County does not anticipate the need for a waste-to-energy during the 10-year planning horizon. The LCSWDC does expect to implement a yard waste diversion operation, a tire recycling operation, and a used oil collection station by December 1995.

B. The steps that Loudon County will take to meet these needs are as follows:

1. Yard Waste Diversion

The LCSWDC is discussing with Santek Environmental Services, Inc. options to divert yard waste from the Class I landfill at Matlock Bend. Santek estimates the volume of yard waste currently received at the landfill at 10,000 tons per year.

2. Material Processing

X.

Currently, Loudon County operates a transfer station on Rock Quarry Road. The throughput rate in 1993 was 10 tons per day. The transfer station is used strictly for unsegregated refuse compaction. The transfer station will continue to operate for the next ten years.

Tennessee Waste Movers operates a recycling processing facility that accepts unsegregated solid waste and manually sorts recyclables. The residual, an estimated 50 percent is disposed of at the Matlock Bend Landfill. This operation is a private concern and not sponsored by Loudon County.

2. Tire Recycling and Waste Oil Recovery will be covered in Chapter

CHAPTER VIII

DISPOSAL CAPACITY

Statutory Requirements:

"Each plan submitted by a municipal solid waste region shall include [a] planned capacity assurance, including descriptions of planned or needed facilities."

[T.C.A. 68-31-815(b)(6)]

In this chapter, the Loudon County region will describe how it will ultimately dispose of that portion of the solid waste stream which cannot be reduced, recycled, reused, composted, incinerated, or otherwise processed.

A. Disposal Capacity

Loudon County has four phases permitted at the Matlock Bend Landfill, owned by the Loudon County Solid Waste Disposal Commission and operated by Santek Environmental Services, Inc. The permitted, planned and existing capacity at the landfill as of January 1, 1994 was 1,438,326 cubic yards. The capacity per phase of planned expansion can be segregated as follows:

Phase 1 278,178 CY

Phase 2 629,796 CY

Phase 3 73,127 CY

Phase 4 457,225 CY

Source: MCI plan 1984.

To provide Loudon County with ten years of disposal capacity assurance, the LCSWDC has contracted with Santek to modify the existing MCI plan and to combine Phases II and IV of the Matlock Bend Landfill. This will result in a total of 1,575,000 cubic yards of capacity, which will provide Loudon County with approximately 15 years of landfill life beginning January 1, 1995.

B. Excess Capacity

While the projections in Tables VIII-1 and 2 show a surplus in capacity over the next ten years, the excess is minimal, so the Loudon County region will monitor capacity closely through the planning period to determine whether an additional phase at the landfill should be permitted and constructed during the ten-year planning period.

C. Capacity Shortfalls

No capacity shortfalls are projected during the planning period.

D. Implementation

Phase 1 will be closed and Phase 2 will begin in September 1994.

Phase 3 will be implemented in September 1997.

Phase 4 will be implemented in September 1998.

E. Region

The Loudon County region is a single county region.

F. Location

The location of the Matlock Bend Landfill is on State Highway 72, 1.3 miles northwest of the I-75 interchange in Loudon.

G. Imported Waste

There are currently no agreements to import waste from another region.

CHAPTER VIII: FORMS

Calculation of Regional Disposal Needs

To define regional needs, the projected regional demands for solid waste facilities will be compared with the projected regional supply—available and planned capacity to provide this disposal.

The Loudon County region has not agreed to accept solid waste from another region as a part of its plan, so no estimated quantity of waste to be imported was added to the regional total demand.

The Loudon County region also has no plans to export solid waste to another region, so the estimated quantity to be exported was not subtracted from the regional demand.

The projected supply is based on data displayed in Chapter II., and Tables II-8 through II-11, and the contract between the LCSWDC and Santek for development and operation of the Matlock Bend Landfill (Appendix G). The projected demand is based on the analysis in Chapter III and conversations between the LCSWDC and Santek.

A conversion factor of 800 pounds per cubic yard for MSW and 1,500 pounds per cubic yard for Kimberly Clark sludge is used for planning purposes.

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

Table VIII-1(a) Cubic Yards per Year

County: Loudon

Year	Demand: Cubic Yards of Waste Requiring Disposal	Supply: Cubic Yards of existing and planned capacity	Surplus
1995	145,526 1	1,575,000	1,429,474
1996	116,025	1,429,474	1,193,707
1997	118,353	1,193,707	1,074,184
1998	119,523	1,074,184	953,478
1999	120,706	953,478	813,577
2000	121,901	813,577	708,469
2001	123,108	708,469	583,668
2002	124,801	583,668	458,117
2003	125,551	458,117	331,311
2004	126,806	331,311	204,505

^{&#}x27;Reduction from 1995 to 1996 due to Kimberly Clark diversion to on-site waste-to-energy facility.

Table VIII-1(b) Tons Per Year

County: Loudon

Year	DEMAND: Tons of Waste Requiring Disposal	SUPPLY: Tons of Existing and & Planned Capacity	Surplus (+)
1995	68,591	630,000	561,409
1996	46,410	561,409	514,999
1997	46,655	514,999	467,786
1998	47,213	467,786	420,573
1999	47,779	420,573	372,221
2000	48,352	372,221	323,288
2001	48,933	323,288	273,768
2002	49,520	273,768	223,654
2003	50 , 114	223,654	172,939
2004	50,715	172,939	122,224

Source: Santek Environmental services, July 1994.

Table VIII-2
Projected Net Disposal Capacity* (Tons)
County/Regional

Year	Remaining Capacity
1995	561,409
1996	514,999
1997	467,786
1998	420,573
1999	372,221
2000	323,288
2001	273,768
2002	223,654
2003 172,939	
2004	122,224

^{*}Loudon County is a single county region (all estimates represent surpluses in capacity).

Source: Santek Environmental Services, July 1994.

PUBLIC INFORMATION AND EDUCATION

Statutory Requirements:

"...[E]ach plan submitted by a municipal solid waste region shall include...a description of education initiatives aimed at business, industry, schools, citizens, and others, which address recycling, waste reduction, collection, and other goals..."[T.C.A. Section 68-31-815(b)(11)]

"...Each solid waste regional plan shall include an education program to assist adults and children to understand solid waste issues, management options and costs, and the value of waste reduction and recycling." [T.C.A. Section 68-31-842]

A. Regional Needs for Public Education/Information

There are 24,189 adults and 5991 school—age children in Loudon County in need of education and information about solid waste reduction and disposal.

B. Regional Goals and Objectives

There is no single source for adult and student education about solid waste issues. Neither the county or the LCSWDC employs a recycling coordinator or an education/information staff person. The county relies on the local chapter of Keep America Beautiful (the Loudon County Beautification Board) to develop recycling education and collection program. The county provides financial support for the recycling collection programs. The local newspapers,

particularly the News-Herald and the Loudon County Independent provide excellent coverage of all LCSWDC meetings as well as any events that impact solid waste decision making in the region. Four local radio stations also report on solid waste issues.

The Loudon County Beautification Board provides Waste in Place curriculum to Loudon County and Lenoir City schools. They also provide in-service training for public school teachers. The Loudon County Solid Waste Disposal Commission holds public workshops for adults and conducts county-wide surveys to obtain citizen input on solid waste policy decisions (see Appendix C for public opinion survey conducted in the winter of 1993.).

The LCSWDC will continue to encourage public education and information about solid waste issues by inviting the public to all meetings, working with the Beautification Board on educating school children, and conducting public opinion surveys.

PROBLEM WASTES

Statutory Requirements:

"...[E]ach plan submitted by a municipal solid waste region shall include...a plan for the disposal of household hazardous wastes; [t.c.a. 68-31-815(b)(8)]

"...Each county...shall provide a service site and shall advertise...the day(s) and hours and location where the household hazardous wastes will be collected...[and]...furnish at least one(1) person...who will assist...[at the] collection unit." T.C.A. 68-31-829].

"...Effective January 1, 1995, no municipal solid waste disposal facility or incinerator shall accept for disposal any whole waste tires, lead acid batteries, or used oil..." [T.C.A. 68-31-866(a)]

"...By January 1, 1995, each county shall provide at least one (1) site to receive and store waste tires, used automotive oils and fluids, and lead—acid batteries...[and]...shall sell and/or cause the transfer of the recyclable materials...to a commercial recycler or a regional receiving facility..." [T.C.A. 68-31-866(b)]

"...(E)ach plan submitted by a municipal solid waste region shall include...any other information as the Director of the State Planning Office may deem relevant to the implementation of the Act." [T.C.A. 68-31-815(b)(15)]

The Solid Waste Management Act directly addresses four problem wastes. Each county or region, 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 each county to develop an infrastructure for accepting, storing, recycling or safe disposal of these materials by the end of 1994. The Loudon County regional plan addresses these requirements.

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 each county to provide a site to receive and store them for ultimate recycling and disposal. The Loudon County regional plan will describe how the region will collect necessary data to locate, design and open these collection sites by the statutory deadline. Specific information to be included for each problem waste is listed below. A more detailed plan will be required when the regional plan is updated in 5 years.

A. HOUSEHOLD HAZARDOUS WASTE (HHW)

Loudon County will co-sponsor with the state of Tennessee a household hazardous waste collection day on June 3, 1995 at the Matlock Bend

Landfill in Loudon County. The landfill is centrally located, easily accessible and suitably surfaced. The education will begin in the winter of 1994 through educating adults and students. In addition to safe management, the public will be taught about safe substitutes for household hazardous waste. Loudon County will provide local volunteers to assist in the collection by providing traffic control and local emergency response. The costs to Loudon County for education and promotional services will be in the form of in-kind services. The County will also provide volunteers for traffic control and emergency contingencies.

B. WASTE TIRES

Waste tires generated in Loudon County are and will continue to be collected at the Matlock Bend landfill. The permitted storage area is a transfer trailer located at the landfill. Currently, approximately 350 tons of tires are received at the landfill each year. The tires are stored until the transfer trailer is full. Once full, the trailer is hauled to Atlanta where the tires are used to produce energy. Santek Environmental Services is responsible for market development or disposal of the tires.

C. WASTE OIL

A portion of the waste oil generated in Loudon County is currently being handled by the private sector. However, to increase the proper disposal of waste oil, a station with a 300 gallon tank to receive waste automotive products will be built at the landfill by January 1, 1995. Santek will contract with a private oil company to transport and recycle the used automotive fluids. Santek will monitor the station to ensure the safety of the public and the environment.

D. LEAD ACID BATTERIES

Lead acid batteries are being collected by the private sector. Residents can also drop-off lead acid batteries at the convenience center or at the Matlock Bend landfill. The station for waste oil that will be constructed at the landfill will also have a storage arae for lead acid batteries.

E. LITTER

Loudon County has a litter prevention program that is funded by a state litter grant of approximately \$20,000 annually. The grant manager is Ann Hammontree of the Loudon County Beautification Board. The program utilizes prisoners to collect litter along the roadside. Complaints about unauthorized dump sites are also investigated by local law enforcement agencies.

CHAPTER XI

IMPLEMENTATION: SCHEDULE, STAFFING AND FUNDING

In this chapter, the preliminary decisions about the components and structure of an integrated solid waste management system appropriate to the region should be revisited.

If the detailed analyses of the selected system components and their alternatives (Chapters IV-X) altered the region's preliminary choices, the system configuration as described in Chapter III may be revised. In particular, the proportion of the total solid waste stream to be handled by each component of the system may be adjusted to reflect higher probability.

However, if further analysis has not changed the proposed components and structure of the regional plan, the final system design should be confirmed, and an implementation schedule, staffing plan, and probable costs established.

A. SYSTEM DEFINITION

1. Narrative

The components of the Loudon County Solid Waste Management Plan are source reduction through special waste management and education, recycling, yard waste composting, and landfill disposal. The projected solid waste generation to be collected and managed as a percent of the total projected amount handled by each system component is estimated below: (These estimates are based upon Chapters III—X).

Projected waste management in 1995 is projected as follows:

Component	Tons per Year	Percent of Total
Industrial waste processing	53,000	51%
Residential waste reduction	550	1%
Yard waste composting	9,000	7%
Landfill	64,000	<u>41%</u>
Total	125,000	100%

B. IMPLEMENTATION SCHEDULE

- 1. Based on the implementation schedules and milestones developed for each plan element described in Chapter V through X, and parts C. and D. of this chapter, the following composite implementation schedule is submitted with milestones for the 10-year period, 1994 through 2003.
- 1. Contract approval and implementation of Phase 2 of Matlock Bend landfill.
 - 2. Approval by LCSWDC and Loudon County Commission of the 10-Year Solid Waste Mangement Plan.
 - 3. Submission of the Plan to the State Planning Office, and the Office of Solid Waste Assistance.
 - 4. Expansion of County Recycling Center.
 - 5. Development of tire recycling program.
- 1. Implementation of a recycling and household hazardous waste education and collection program.
 - 2. Development of yard waste composting, tire shredding, waste oil collection, and lead acid battery programs at the landfill.
- 1998 1. Implementation of Phase 3 of Matlock Bend Landfill.

ALICCATION OF IMPLEMENTATION RESPONSIBILITIES: PLAN ADOPTION AND SUBMISSION

Loudon County is a one-county region. The full responsibility for implementation resides with the LCSWDC and the County Commission. The regional plan has been formally adopted by resolution of the regional administrative board (the Loudon County Solid Waste Disposal Commission) and signed by its Chair. The plan has also been adopted by the Loudon County Commission, to acknowledge the county's commitment to support the plan and to assure that the municipal solid waste region has compiled with T.C.A. 13-3-105 and/or 13-4-104. A copy of the minutes of the county commission meeting indicating that this draft municipal solid waste plan has been submitted to the county commission for review, comment, and adoption before it was submitted to the State Planning Office is included in Appendix E.

FLOW CONTROL AND PERMIT APPLICATION REVIEW

A. The Solid Waste Management Act of 1991 authorized regions with approved plans to exercise certain flow control powers in accordance with the plan. The Act permits regions to exercise two (2) types of flow control: (1) the out-of-region waste ban [T.C.A. Section 68-31-814(b)(1)(B)]; and (2) intra-region flow control [T.C.A Section 68-31-814(b)(1)(A)]. Authorities formed under this Act are also permitted to exercise broad flow control powers (T.C.A. Section 68-31-907]. The regional plan should specifically describe any flow control measures which it may include in its plan, and set forth a schedule for adoption.

The two types of flow control measures address two separate sets of policy concerns. Out—of—region bans are permitted in order to permit a region to carefully shepherd the capacity of its solid waste management facilities. An out—of—region ban must apply equally to all waste generated outside of the region's boundaries or the ban may be invalid under the Interstate Commerce Clause of the U.S. Constitution. The Act does exclude certain existing waste source arrangements from the exercise of flow control under a "grandfather" clause and an impairment of contract clause [T.C.A. Section 68—31—814(b)(1)(B)] and T.C.A. Section 68—31—814(b)(4)]

B. The Act also requires a municipal solid waste planning region with an approved plan, or a solid waste authority formed by the region, to review plans for

new solid waste disposal facility or incinerator to determine whether the proposed facility is consistent with the regional plan [T.C.A. Section 68-31-814(b)(1)(D); T.C.A. Section 68-31-814(b)(2); and T.C.A. Section 68-31-814(b)(3)].

The three Intergovernmental bodies have the authority to review applications for any proposed facilities, and approve/disapprove the applications. The procedure includes provisions for public comments, resolution/ordinances that must be adopted, and documentation of the actions taken. The Loudon County Commission has asked the LCSWDC to appoint a committee to review new applications.

PLEASE NOTE:

The recent Supreme Court decision of Fort Gratiot Sanitary Landfill, Inc., v.

Michigan Department of Natural Resources and proposed legislation which is pending in Congress may require issuance of new, revised or supplemental quidelines for this chapter.

PART III

APPENDICES

APPENDIX A

Legal Documentation and Organization of the Region

- To assure that the municipal solid waste region was established and is operating in accordance with T.C.A. Section 68-31-813, please provide copies of the following documents:
 - Certified copy of the resolution adopted by each county commission, establishing the region [T.C.A. Section 68-31-813(a)].
 - 2. Description of the administrative board for the region, including:
 - a. list of members, including the jurisdiction each represents, and term of office;
 - copy of the appointment letter for each member, and a record of their confirmation (resolution or minutes) by the appropriate legislative body(ies). [T.C.A. Section 68-31-813]; and
 - c. a list of the current officers of the board (1993).
 - 3. If the responsibilities of the planning region are to be performed by an existing Solid Waste Authority, provide:
 - a. a copy of all resolutions designating the authority as the regional administrative board [T.C.A. Sections 68-31-813(a)(2) and 68-31-815(b)(12)]
 - b. a copy of the statutes and/or resolutions creating the authority;
 - c. a list of the members of the Authority's Board of Directors, including the jurisdiction each represents, and term of office.
 - 4. Description of the structure and role of Regional Municipal Advisory Committee [T.C.A. Section 68-31-813(e)], including:
 - a. a list of members, the interest each represents, and term of office;
 - b. mission statement;
 - c. summary of activities during plan development; and
 - d. probable role in implementation.
- II. To assure that the municipal solid waste region is complying with other provisions of the Solid Waste Management Act of 1991, please submit letter(s), signed by the appropriate County Executive and Mayors in the region, certifying that each jurisdiction has complied with the financial accounting requirements of T.C.A. 68-31-874(a), as amended. For municipalities, the letter of certification should indicate the name of the special revenue fund established by that city.

AMENDED AND RESTATED LOUDON COUNTY SOLID WASTE DISPOSAL AGREEMENT

An Intergovernmental Agreement between the City of Lenoir City, the County of Loudon, and the City of Loudon

THIS AGREEMENT, made and entered into effective the <u>lst</u> day of <u>March</u>, 1993, by and between the COUNTY OF LOUDON, THE CITY OF LENOIR CITY, and THE CITY OF LOUDON, all political subdivisions of the State of Tennessee;

WHEREAS, by an intergovernmental agreement, dated September 12, 1983, the parties agreed to the procurement and development of a permanent sanitary landfill site for Loudon County; and

WHEREAS, under the agreement Loudon County assumed the responsibility for the procurement of the site, issued capital outlay notes in the sum of Two Hundred Fifty Thousand Dollars (\$250,000.00), and by eminent domain, obtained the Hirsch-Powell property on Old State Highway 72 near the Matlock Bend area for the approximate amount of One Hundred Fifty-Three Thousand Dollars (\$153,000.00); and

WHEREAS, during that time, the City of Loudon continued to operate the jointly leased Poplar Springs landfill site previously operated by joint agreement of the parties hereto, and was responsible for the maintaining of the jointly owned assets and the sanitary landfill funds that were derived from the revenues from the operation of the leased landfill; and

WHEREAS, the Matlock Bend sanitary landfill site was constructed and prepared, and at the time of the execution of the subsequent June 1, 1987, agreement (which this agreement amends), the Poplar Springs landfill had been closed and the new site was in operation under the continuing daily operational responsibility of the City of Loudon, as agreed to by the parties; and

WHEREAS, the Solid Waste Disposal Commission formed under this original agreement, has been responsible for the operation of the Matlock Bend Sanitary Landfill since that time, and in recent years has had an operational agreement with Santek Enterprises of Cleveland, Tennessee; and

WHEREAS, it appears that the cost of operating sanitary landfills, or other solid waste disposal methods, because of more stringent regulations, is going to increase in the future, and a joint operation is essential; and

WHEREAS, it now further has been agreed that the Loudon County Solid Waste Disposal Commission, is to be organized as a continuation of the previous Commission, but to comply with the new regulations and laws involving the Solid Waste Management Act of 1991 (T.C.A. 68-211-801 et seq.), wherein Loudon County has been approved as a Solid Waste Planning Region, for which the Loudon County Solid Waste Disposal Commission shall become the Board for the newly created Loudon County Solid Waste Region; and

WHEREAS, the Loudon County Solid Waste Disposal Commission has been responsible for the overall supervision of the landfill, the development of policy, and for all decisions about solid waste management disposal in Loudon County, and these responsibilities, along with the new authority and responsibility that devolves upon the Commission by virtue of the Solid Waste Management Act of 1991, shall continue except as otherwise properly limited by this Agreement; and

WHEREAS, basically the original Intergovernmental Agreement shall continue, but with some changes being desirable and necessary, it is agreed the new operational agreement is stated as follows:

WITNESSETH

NOW, THEREFORE, IT IS AGREED between the parties as follows:

1. Required Participation: That all parties hereto shall participate in the use of a joint landfill site, called the Loudon County Sanitary Landfill, on Old Highway 72, for all solid waste collected by the parties, which includes, at the least, all residential sanitary waste, and all commercial and industrial sanitary waste, controlled by the parties except for demolition waste and other waste not acceptable by law. However, where deemed appropriate, exemptions or exceptions may be made by the

Commission to the requirement that the landfill <u>must</u> be used by the parties to the Intergovernmental Agreement.

- 2. Establishment of Commission: There shall be seven (7) members of the Commission. Five (5) shall be appointed by the County Executive and approved by the County Commission, and one (1) member each shall be appointed by the Mayors of the Cities of Lenoir City and Loudon, and approved by the respective City Councils. Members of the Commission shall serve six (6) year terms. The three original slots (appointed by the two Mayors and the County Executive) shall each be for initial six (6) year terms (Panel A); two of the members appointed by the County Executive shall serve an initial four (4) year term (Panel B); and two of the members appointed by the County Executive shall serve an initial two (2) year term (Panel C), all terms to be effective March 1, 1993.
- 3. Assets of the Commission: All monetary and other capital assets resulting from the previous existing agreement and operation of the Poplar Springs landfill, and all assets accrued in the intervening time, shall continue under jurisdiction of the new Commission.
- 4. <u>Purpose and Authority of the Commission</u>: The Commission shall have the purpose, authority and responsibility for:
- A. The overall supervision of the landfill to include the following:
- (1). The establishing of policies for the operation and management of the landfill to include major capital expenditures.
- (2). The raising or lowering of tip fees or other charges that might be assessed for the use of the landfill.
- landfill will be done by the City of Loudon for a period of one (1) year from the date the new landfill is opened, at which time the arrangement will be reviewed and a decision made by the Solice Waste Disposal Commission as to the continuation of the operational agreement, or as to some other alternative management.

The current operation and management agreement shall remain in effect until such time as a new agreement is reached by the Solid Waste Disposal Commission as to a change.

- unbudgeted purchase of capital items, the expenditures of any major sums of money, and the obligation of the Commission to any contracts for more than one (1) year are policy decisions to be made by the Disposal Commission.
- (5). The decision as to what organizations, businesses, and parties may utilize the landfill and any other disposal facilities operated by the Commission shall be under the jurisdiction and discretion of the Commission.
- B. The periodic review, and study if necessary, of the solid waste disposal problems and needs of the County, and to make recommendations to the respective governing bodies of the parties to this agreement.
- c. Assumes all authority and powers, and the responsibilities, which devolve upon a municipal solid waste region board (T.C.A. 68-211-801 et seq.) by virtue of State law and regulations.
- 5. Organizational Rules of the Commission: The Commission shall be authorized to adopt its own rules of organization and procedure except as otherwise required herein.
- A. The Commission may set its own meeting days, times, and dates, although it is required to meet at least quarterly.
- B. A quorum is the personal presence of at least four (4) members, and at least four (4) affirmative votes are required before any action can be adopted.
- c. Special meetings may be called by the Chairman or by any two (2) of the parties by giving reasonable notice of the time and place of such meeting to all members.
- D. Notice to the public of all meetings shall be given by a written notice delivered to the News-Herald.
- E. Minutes shall be kept of all meetings of the Commission.

- Monthly Reports: The operator of the landfill shall prepare and provide monthly reports to the other parties.
- 7. Annual Budget: The operator shall prepare a proposed annual budget for presentation to and approval of the Solid Waste Disposal Commission. The budget for the preceding year shall be a continuing document into the subsequent fiscal year until a new budget is adopted.
- Audits and Records: There shall be an annual audit 8. of the funds of the Commission.
- Duration of Agreement: 9. The duration of this is indefinite or until otherwise agreed as to agreement Termination requires a unanimous vote. Any one termination. party may withdraw at any time, but shall do so by forfeiting any rights as to the allocation of any assets that might remain.
- <u>Disposition of Assets</u>: The disposition of assets shall be by agreement of the parties at the time of termination of this agreement, subject to ratification of the respective governing bodies.
- 11. This Agreement contains amendments from the original Intergovernmental Agreement, and the signatures below indicate approval by the parties to the agreement that this is the restated agreement that shall govern the activities of the parties in waste disposal matters in Loudon County.

IN WITNESS WHEREOF, the duly elected officers of the parties hereto, pursuant to approval from the respective governing bodies, have hereunto set their signatures of each political subdivision, the said agreement to be effective the day and date first above written.

CITY OF LENOIR CITY	COUNTY OF LOUDON
BY: Dued L. Lane	BY: Ling M. Miller
ATTEST:	ATTEST:
Harold E Pwan	July D Wangles
City Recorder	County Clerk
CITY OF LOUDON	ATTEST:

Carrected capy

A Public Hearing was held on March 1 1993, concerning the Loudon County Recreation Board.

A Public Hearing was held on March 1,1993 concerning the following:

Rezoning on Hwy 11, Map 29, Parcel 89.00 from A-2 Rura Residential to C 2 General Commercial.

There being no comments , the Hearing was closed.

Be it remembered that the Loudon County Legislative Body me in regular session on March 1, 1993 at 7:05 P.M. with the Chairman, J.J. Blair presiding and County Clerk, Riley D. Wampler were present, whereupon Sheriff Tim Guider Opened Court Led the Pledge of Allegiance to the Flag and present Rev. Kenneth Johnson, who gave the Invocation.

The following Commissioners were present:

Blair Park Twiggs Price

Millsaps Williams Masingo Maples

FEBRUARY, 1993 MINUTES APPROVED

SKIT GIVEN
BY
PHILADELPHIA
STUDENTS ON
COMMITMENT

RESOLUTION
REQUESTING
L.C. REGIONAL
PLANNING COMM.
TO RECONSIDER
SILO ACRES/
MISTY RIDGE
SUB-DIVISION

NATIONAL GUARD UP-DATE Commissioner Bledsoe was absent.

On Motion of Commissioner Price, and seconded by Commission Park, the minutes of the last meeting were approved.

Commissioner Millsaps introduced Philadelphia School to present a skit on Commitment. After the skit, each Commissioner was presented buttons for rain forrest preservation.

Commissioner Twiggs presented a Resolution concerning the decision of Lenoir City Regional Planning Commission concerthe Misty Ridge Sub-division Plat. After much discussion a talk from Ross Rauson, Commissioner Williams seconded the motion to accept the resolution and the vote was unanimous. The Resolution is attached hereto as Resolution No. 1990.

County Executive George Miller gave a report concerning the National Guard Armory. Mr. Miller stated he had talked to Nashville and that they have thearchitectural plans. The plans are going to be approved as soon as possible.

COURT HOUSE STUDY

County Executive George Miller reported he had talked to Mr Brewer concerning the Brewer Property located behind the Courthouse. A price of \$30.000.00, without the house is still being considered. It was moved by Commissioner Price and seconded by Commissioner Milsaps that Mr. Brewer given until June 1, 1993 or 90 days to talk to Mr. Grindstand see if they wanted to move the house. The vote was 8 to 1 in favor, with one abstaining. Commissioner Maples abstained.

RESOLUTION
APPROVING
APPOINTMENTS
TO SOLID
WASTE
BOARD

County Executive, George Miller presented a Resolution to the Commission to approve the appointment of five members to the Municipal Solid Waste Planning Region Board. After much discussion, when some of the Commissioners gave their reasons why they submitted the names for some of the board members, it was then moved by Commissioner Millsaps and seconded by Commissioner Millsaps and seconded by Commissioner Twiggs that the Resolution be approved. By Roll Call, the vote was 4 in favor and 3 against and one abstaining. After Loudon County Attorney, Harvey Sproul explained that the board was a state regulation that each county would have to have to stay in the landfill business. Commissioner Park explained that he should change his vote. Upon another motion by Commissioner Millsaps and seconded by Commissioner Twiggs, a Roll Call vote was made The vote was five in favor (Blair, Millsaps, Price, Park, & Twiggs), 2 against (Williams & Maples), and one abstaining (Masingo). The Resolution is attached as Resolution No. 9-93В Exhibit____

RESOLUTION
APPROVING
AMENDMENT TO
THE
INTERGOVERNMENTAL
AGREEMENT
FORMING THE
LOUDON CO.
SOLID WASTE
DISPOSAL
COMMISSION

County Executive George Miller presented a motion to approve Amendments to the Intergovernmental Agreement which formed the Loudon County Solid Waste Disposal Commission. After discussion it was moved by Commissioner Millsaps and seconded by Commissioner Twiggs that the Resolution be approved by a Roll Call Vote. The vote was 5 in favor (Blair, Millsaps, Price, Park & Twiggs 2 against (Williams & Maples) and 1 abstaining (Masingo). The Resolution is attached hereto as Resolution No. 10-93 Exhibit C

RESOLUTION
SUPPORTING
FAIR SHARE
OF FEDERAL
FUNDING TO
Y-12 WEAPONS
PLANT

County Executive George Miller presented a Resolution to support Federal Funding Fair Share to the Y-12 Plant in Oak Ridge, Tennessee to support the advancement of the Neutron Source Project It was moved by Commissioner Williams and seconded by Commissioner Maples that the Resolution be approved. The vote was unanimous and is hereby attached as Resolution 11-93 Exhibit D.

LOUDON CO.
DOMESTIC
VIOLENCE
CENTER
REPORT

County Executive George Miller presented a request from Marsha Jefferson, Executive Director of the Domestic Violence Center to be placed on the list of County Agencies to be allowed to purchase Federal Surplus Property. It was moved by Commissioner Park and seconded by Commissioner Williams that they be allowed to be place on the list. The vote was unanimous.

ROAD COMM.
TO ASSIST ...
TORNADO
VICTIMS

Road Commissioner, Don Palmer asked the Commission if he could assist in the clean up of damage caused by the tornade.

Commissioner Park made a motion and it was seconded by Commissioner Williams that he could assist any property owner on their property if the damage was caused by the tornado. The vote was unanimous.

BUILDING COMMISSIONER'S REPORT

Building Commissioner Doug Lawrence gave a report for the month of February, 1993:

Permits sold: 33 Fees: \$2,396.00 Value: \$1,062,000.00 Taxes: 7,560.00 NATIONAL 4-H MEMEBERS HONORED PLANNING COMMISSION:

TO REZONE
MAP 18,
PARCEL 7.04
6th DISTRICT

State Planner, Pat Phillips presented a Resolution to rezone Map 18, Parcel 7.04 from A-2 Rural Residential to R-1 Suburba-Residential in the 6th Legislative District; on a motion by Commissioner Twiggs and a second by Commissioner Masingo, the vote was unanimous. The Resolution is hereby attached as Resolution 13.43 Exhibit

PLANNING COMMISSION:

TO REZONE
MAP 29,
PARCEL 89.00
HYY.11
5th DISTRICT

State Planner, Pat Phillips presented a Resolution to rezone Map 29, Parcel 89.00 located on Hwy 11, 5th legislative distrito be rezoned from R-l Suburban Residential to C-2, General Commercial. On a motion by Commissioner Williams and second by Commissioner Park, the vote was unanimous with all in favor.

The Resolution is hereby attached as Resolution 14-43 Exhibit 6.

NOTARIES APPROVED

It was moved by Commissioner Price and seconded by Commissione Maples the the following Notaries be approved:

Dennis E. Moldenhauer, Charlotte B. Queen, Jack Randolph, Willard D. Price, Royce M. Norman, Joan Hartline, Noel O. Patterson, Jackie Sartin, and Jessica R. Proaps.

COURT ADJOURNED It was moved by Commissioner Price and seconded by Commissione Park to adjourn. The vote was all in favor. Court Adjourned at 8:45.

County Clerk

LOUDON COUNTY SOLID WASTE DISPOSAL COMMISSION MEMBERS AS OF NOVEMBER 1994

CHAIRMAN

Wayne Tolbert - CITIZEN APPOINTMENT 9598 Antioch Church Road West Lenoir City, TN 37771

VICE-CHAIR

Donald Pace - REPRESENTING CITY OF LENOIR CITY 203 Pike Street Lenoir City, TN 37771

TREASURER

Aileen Longmire - CITIZEN APPOINTMENT 3815 Matlock Bend Road East Loudon, TN 37774

Albert Jorden Jr. - CITIZEN APPOINTMENT 502 Mulberry Loudon, TN 37774

Mel Hines - REPRESENTING CITY OF LOUDON 706 Mulberry Loudon, TN 37774

David Twiggs - REPRESENTING LOUDON COUNTY COMMISSION 2707 Lakeview Drive Lenoir City, TN 37771

LOUDON	COUNTY	COMMISS	ION
RESOLUTIO	NO.		

RESOLUTION APPROVING OR ACKNOWLEDGING BOARD OR COMMITTEE APPOINTMENT BY COUNTY EXECUTIVE

WHEREAS, by statute, and/or intergovernmental agreement and/or County Procedural Regulations, the County Executive has authority to make certain committee and board appointments; and

WHEREAS, an appointment (or appointments) is necessary and/or desirable at this time; and

WHEREAS, the County Executive appoints the following as a member of:

	of Committee or	Board)	
Appointee			Term Expiration
Panel A:			
I.D. "Babe" Conner			March 1999
Barry Baker			March 1999
Jerry Masingo			March 1999
Panel B:	:		
Al Jorden			March 1997
Wayne Tolbert			March 1997
Panel C:			
Aileen Longmire			March 1995
Frank Kamel			March 1995
	-		
TTEST:	COUNTRY (CHAIRMAN	- WVC
Dy Duandle DUNTY GLERK	APPROVED:	V (N)	(lw
COMMITTEER ARE AS follows:	APPROVED:	V (N)	for said board
e remaining members and their c	APPROVED:	V (N)	
e remaining members and their c	APPROVED: COUNTY/E	Y [N]	
e remaining members and their c committee are as follows:	APPROVED: COUNTY/E continuing expire	Y [N]	

May 10, 1993

The City Council met in its regular meeting at City Hall on May 10, 1993 at 7:30 PM. Mayor Eblen and the following aldermen were present: Cheatham, Conner, Hamby, Hines, McNabb, Pace.

A motion was made by Hamby and seconded by Conner to approve the minutes of previous meeting of April 26, 1993 as written. The following vote was recorded to:wit with Cheatham, Conner, Hamby, Hines, McNabb, and Pace-voting AYE.

A motion was made by Conner and seconded by McNabb to approve the minutes of the special called meeting of May 3, 1993 as written. The following vote was recorded to:wit with Cheatham, Conner, Hamby, Hines, McNabb, and Pace voting AYE.

A motion was made by McNabb and seconded by Hamby to pass a resolution to approve the recommendation of a permanent Chief of Police by the personnel committee. The following vote was recorded to:wit with Cheatham, Conner, Hamby, Hines, McNabb, and Pace voting AYE.

A motion was made by McNabb and seconded by Conner to pass an ordinance to rezone property owned by Kenneth Flynn on Kingston Street from R-2 Residential to C-3 Commercial. The following vote was recorded to:wit with Cheatham, Conner, Hamby, Hines, McNabb and Pace voting AYE. First Reading.

A motion was made by Hamby and seconded by Pace to pass an ordinance to rezone property owned by Kenneth Flynn on Kingston Street from R-2 Residential to C-3 Commercial. The following vote was recorded to:wit with Cheatham, Conner, Hamby, Hines, McNabb and Pace voting AYE. Second Reading.

A motion was made by Conner and seconded by Hines to appoint Councilman Donald Pace to represent the City on the Loudon County Landfill Committee. The following vote was recorded to:wit with Cheatham, Conner, Hamby, Hines, McNabb, and Pace voting AYE.

A motion was made by Hamby and seconded by Hines to pay all bills and accounts of the City when properly approved and with funds available. Bills and accounts being set out as the following:

1888-F. Amer. Bank-transfer for payrolls	50,000.00
1889-Aapple Ins bonds for officials	105.00
1890-ORNL Federal CU-cu deduction for emp.	1,863.00
1891-LCFD- food deduction	157.50
1892-LC Fire Fighters Assoc- dues deduction	30.00
1893-UPS- postage for shipment pick-up	9.91
1894-FNB- SS for LC Sch emp 5/15/93	25,306.59
1895-FNB-SS for City emp 5/15/93	9,578.22
1896-FNB-WH for LC Sch emp	24,209.62
1897-FNB-WH for City of LC emp	6,901.64
1898-Riley D. Wampler- reg trk for parks	12.50
1899-FNB- School Warrants 5/93	752,884.80
1900-TML Risk Mgt- OSHA workshop for fire dept	20.00
2853-Jack Denton-exp for April	25.00
2854-Douglas Hines for April	25.00
2855-William H. Luckett- exp for April	25.00
2856-Dixie Miller- exp for April	50.00
2857-JW Wilburn Hardware-Library exp	173.29
2858-Air Products- st exp	9.90
2859-Paul Ann Baker- exp for seminar	200.00
2860-Burpee Locksmith- city hall exp	209.60
2861-B&S Industries- fire dept exp	132.83
2862-Debbie Cook- seminar exp	200.00
2864-Jack Denton- exp for May	25.00
2865-EW Jenkins- fire dept exp	3.96
2866-Food City- fire dept exp	104.94
2867-Fay Port Bldgs- st dept exp	40.00
2868-Tire Center of Knoxville- st dept exp	327.40

REGIONAL MUNICIPAL ADVISORY COMMITTEE

Ivar Carlson 210 Kiyuga Lane Loudon, Tennessee

INTEREST- Tellico Village resident

Harry Gillman PO Box 397 Lenoir City, Tennessee

INTEREST- Tennessee Waste Movers

Mitchell D. Martin Jr. PO Box 335 Loudon, Tennessee

INTEREST- Viskase Corp.

Ann Hammontree 100 River Road #104 Loudon, Tennessee

INTEREST- Loudon County Beautification Board

REGIONAL MUNICIPAL ADVISORY COMMITTEE

MISSION STATEMENT

The Advisory Committee was created to ensure public participation in the activities of the Loudon County Solid Waste Disposal Commission. This committee was involved in the planning process of the 10-Year Plan, and will be called on in the future to assist the Commission in carrying out the Plan.

ACTIVITIES DURING PLAN DEVELOPMENT

The Advisory Committee recieved draft copies of the 10-Year Plan, and attended workshops to discuss the plan and offer information.

ROLE IN IMPLEMENTING THE PLAN

The Advisory Committee will be kept informed of all meetings of the LCSWDC, and will be informed of all steps taken to implement the Plan. The LCSWDC will periodically call on the Committee for input and ideas regarding specific issues.



County of Loudon

GEORGE M. MILLER

COUNTY EXECUTIVE

100 RIVER RD. #106

LOUDON, TENNESSEE 37774

PH. 458-4664

June 7, 1994

Loudon County Solid Waste Disposal Commission 100 River Road, #109 Loudon, TN 37774

To Whom It May Concern:

Loudon County has complied with the financial accounting requirement of TCA 68-31-874(a).

Sincerely,

George M. Miller

Loudon County Executive





CITY OF LOUDON

CITY HALL P.O. BOX 189 LOUDON, TENNESSEE 37774

November 3, 1994

Ms. Beth Burklin Loudon County Solid Waste Disposal Commission 100 River Road #109 Loudon, TN 37774

Dear Ms. Burklin:

This letter is to confirm the City of Loudon is in compliance with the financial accounting requirements of T.C.A. 68-31-874(a), as amended. The City of Loudon accounts for all revenues and expenditures regarding solid waste activities in a special revenue fund titled the Sanitation Fund.

If you need more information please contact Stephanie Putkonen at 458-7513.

Sincerely,

Bernie R. Swiney

Bernie R. Same

Mayor

BRS:sp

FITY COUNCIL
//illiam F. Cheatham
Idus D. Conner
Gerald (Gene) Hamby
Douglas (Buddy) Hines
Thomas A. McNabb
Donald Pace



Harold E. Proaps

CITY JUDGE

Thomas F. Ingram

CITY ATTORNEYS

Terry Vann

RECORDER-TREASURER

600 EAST BROADWAY - P.O. BOX 445 LENOIR CITY, TENNESSEE 37771 Phone (615) 986-2715 - Fax 988-5143

November 9, 1994

Ms. Beth Burklin Loudon County Solid Waste Disposal Commission 100 River Road Loudon, TN 37774

Dear Ms. Burklin:

This letter is to confirm that the City of Lenoir City is in compliance with the financial accounting requirements of T.C.A. 68-31-874 (a), as amended. The City of Lenoir City accounts for all revenues and expenditures regarding solid waste activities in a special revenue and expenditure fund titled the Sanitation Fund.

If you need additional information, please let me know.

Sincerely,

Harold E. Proaps Recorder-Treasurer

CITY OF LENOIR CITY

HEP/dc

APPENDIX B

Documentation for Adjustments to the Base Year Generation

This appendix contains documentation for adjustments to the base year generation, or variances from the waste reduction goals, as set forth in [T.C.A. Section 68-31-861(a) and (b) and discussed in Chapter IV. If no county in the region has utilized these options, omit this Appendix.

1. Adjustment of 1989 Generation Data:

- a. a copy of the county's letter to the Director of the State Planning Office requesting an adjustment to the 1989 base line data, and setting forth reasons for the adjustment;
- b. copies of any supporting documentation;
- c. copy of a letter from the Director of the State Planning Office approving the adjustment.

2. "No Collection" Variance

- a. copy of the county's letter to the Director of the State Planning Office requesting a variance;
- b. copy of a letter from the Director of the State Planning Office granting the variance.

3. Previous Waste Reductions (1985-1989)

If the region claims credit against its waste reduction goal for waste reduction and recycling programs in 1985 through 1988, provide documentation for those reductions.

Documentation could include sales records from a public recycling center, annual reports indicating quantities handled, etc.

LOUDON COUNTY SOLID WASTE DISPOSAL COMMISSION 100 RIVER ROAD #109 LOUDON, TENNESSEE 37774

May 25, 1994

Carol White, Director Tennessee State Planning Office 307 John Sevier Building 500 Charlotte Avenue Nashville, Tennessee 37243-0001

Dear Ms. White:

In response to T.C.A. Section 68-31-861(a) and (b), this letter is to request an adjustment in the 1989 waste generation baseline data for Loudon County's Regional Solid Waste Plan (Chapter IV). The Loudon County Regional Solid Waste Plan will contain the following documentation for an adjustment to the base year generation and variances from the waste reduction goals:

The population and quantity of solid waste generated and disposed of in calendar 1989 for Loudon County were 31,500 and 67,930, respectively. Thus the waste generated and disposed of per capita was 2.16 tons per capita per year. This figure reported the actual disposal amount bу Environmental Services operator of the Matlock Bend Landfill and recorded by the Loudon County Solid Waste Disposal The UT study estimated a waste Commission recorder. generation of 26,508 tons per year based on national waste generation averages and population estimates. For planning purposes, Loudon County proposes to use the actual disposal figure reported by Santek and Loudon County, not the UT estimate.

Documentation of the waste disposed at the Matlock Bend (Loudon County) landfill from 1988 through 1991 is enclosed to provide verification of the actual waste disposal amounts. Therefore, we are requesting an adjustment of the base year generation from 26,508 to 67,930 tons. If you have any questions, please call Beth Burklin, the LCSWDC administrative assistant at 966-6097. Thank you for your consideration.

Sincerely,

Wayne Tolbert, Chair Loudon County Solid Waste Disposal Commission

cc: Paul Evan Davis, Director Division of Solid Waste Assistance

-		TOTAL	TONS	8,308.75	9.085.54	8,144,06	8,571.60	6,764.23	6,306.42	5,819.20	5,333,30	6,918,13	7,020.35	B 049 48			86.698.86	-	+		TOTAL	TONS	8,433,66	8.517.64	9,918,16	3,100.44	10 235 90	10,775.22	11,374.52	9.911.89	10,114.43	11.038.66	10.480.75		120,884,56				TOTAL	TUNE	9,500.14	10,430,00	07 000 11	B DC CC. C.	11 281 37	+
				8	000	18.40	8	000	0.80	0.00	0.00	0.0	0.55	22.0			09.61					TORNADO	000	000	8 6	38	800	0.00	2,489.80	490.65					2.980.45		Ì		1	TORNADO	Ī					
		s		4.516.57	5.033.09	5,581,96	5.450.35	3,811,33	3,266 32	2,664.90	2,794.40	3,171,13	3.414.40	4 432 50			47.154.95						0.00	000	3 8	9	1,70	0.00	0,00	0.50	2.15	800	000		4.35				T	ASBERTOR	31.4	200	2	32.0	0.15	
		SUB-TOTAL		486.39	950.15	148.65	486.39	486 39	486.39	111.75	103.40	128.25	20,20	135.30		00000	20 220 00					INDUSTRIAL ASBESTOS	4.578.41	5 394 69	7 066 30	7.477.64	7.041.55	7.898.42	6,025.79	5.822.89	6.470.63	6 963 14	6,659,80		78, 188, 36					S 147 80	6 713 56	7,853,65	197 10	7 564 80	7,750,10	
			RECULAR	3.305.79	3.082.30	2,385,05	3,305.79	3,305,78	3,305,79	3,022,55	2 435 50	3,618,75	3 2 2	3 481 43			90 080 00				£3	DEMO	121.80	39.40	35.60	L	L	148.30	73.75	185.15	208.70	295.75	0E.122		1,752,95			o to You o	508-101A	DENIO	198 50	166.75	L		14.00	
		8	ASBESTOS			0.20			080				0.33	0.25		40,	200				SUB-TOTALS	REGULAR	3 735 45	3 043 95	2 595 60	-	3 101,30	-	\vdash	_+	4	311111	3.588.65		37 958.45					3 733 AD	3,513.85	3 411 80	3 532 90	3 086 32	3,387,12	
		OTHER USERS	DEMO	_		_	l	_[50.35	1	53.65	1	26.35	L	Ц	000	00,000,00					23 65		3 8		L	1.3						3	Ц	4.35			L.		ASSESSTOR		9		L	0.15	l
			ă	Į		-1	A P	1	200.60	- [ı,		28.5	Ļ		000	_				OTHER USERS	ă		36.35	L			Ц	12.90		2	_	Ĺ	Ш	738.68			OTMED HEEDE	אביים	75 10	L	8 8	L	31.40	L	l
		METAL RESOURCES	INDUSTRIAL	7267	77.74.04	2,514,91	7, 104 24	06/30	338.92	215 20	8 15	107.38	447 65	834.75		20 237 64	2,130.40				10	RECULAR	880.75	933.70	809 20	27 70	841.45	828.20	646.65	787.45	1.084.40	00.550	7 7	000	10,789.80			10	5 0. 11	1 193 00	1,042,35	917.95	962.85	1 281 77	947.35	
		E	RECULAR						8.							9	3				SOURCES	INDUSTRIAL PLECULAR	568.28	1 515 81	1242.09	117914	1,124,95	1,441.27	682.64	588.49	1.512.73	200	200.		4.32 11,685.88			*#JUBICO	MOTION IN THE PARTY OF THE PART	289.09	390.86	258.00	451.84	234.29	171.55	
JDFILL	S)	CLARK	SPUSTRIAL	30.000	2,020.30	2.31.30	7 007 03	2,087.2	2,798.25	2.334.10	2,162.33	2,013,03	244120	3,482.00		11 500 10	200	2	-83		METAL RESOURCES	RECHIVE			:							4.35			4.32	S	ž	METAI RESOLIBORS	MC IMP OF	Kronva		5.05				
OUDON SANITARY LANDFILL	LARGEST CUSTOMERS Tonnages for Fiscal Year 91-92	N WASTE MOVERS KIMBERLY-CLARK	REGULAR	04 04	32.60	32,80	0,00	000	200	37.83	32.10	15.45	31.80	112.30		A87 10	3	LARGEST CUSTOMERS	Tonnages for Fiscal Year 92-93		SCARK A	INDUSTRIALIBECTIAN	3 673 75	5 16A 75	5,703,35	6 150 50	I. I		5 203 10	5,089,80	94 90	2 270 70	0.673.0		553.85 65,049.43	LARGEST CUSTOMERS	Tonnages for Fiscal Year 93-94	KIMBERLYCLAR	INCIDENTIAL METAL	4.895.05	ı			┺	7,450.25	
N SANIT	RGEST C	MOVERS	DENIO		l							A 15				A 34	3	RGESTC	ages for Flu		KIMBERLY-CLARK	REGULAR	26.00	45.20	60.85	30.70	36.40	73.70	43.60	30.75	E 94	33.40	200		553.85	AGEST C	spee for Fie	KIMBE	0 VICTOR 10	1_	95.25	67.15	59.55	79.40	77.25	
LOUDO	₹ Ten	TN WAST	ATO ED	31 1/4	2 2 2 2	01 347	378.70	07.016	07 CT	00.71	2 2	282.05	424 90	358,25		3 964 70		3	Ţ			o con													8	2	Tonn	MOVERS	200	_						
			INDICATING RE	150 00	26.32	100.10	2 82	20.00	2 2 2	00 07	20.07	28.50	89 15	115.75		1 808 50					TN WASTE M	TAN DO	157.20	159.30	168.85	232.55	209.90	125.95	162 40	20.70	128.45	269 50	20.00		2,408.35			TN WASTE M	DECTION AN	321.75	291.65	269 05	178.25	200,15	179.40	
		R REFUSE	24 14		1				Ī	Ţ		Ţ				21 15						INDUSTRIAL RECOLAN	134.40	112.55	120.85	144.00	151.60	145.75	160.05	164.60	147 40	2			1,473.05			Ī	INDICATE AND	133.75	123.65	118.85	108.10	112.65	128.30	
		VOLUNTEER REFUSE	4 55R 05	1390.20	070 55	200	. 47 RS	377.86	30 777	0. 970	07.040	1 284 90	1,164.45	1,225.20		18.20 15.403.85					VOLUNTEER REFUSE	DENTO													3			138	DEMO	2						
			ES CO		06.81	7.01										18.20					VOLUNTE	KEG. AR	26 7 183	1075.25	775.85	812.70	1,129.15	918.40	1,257.18	0,0	761.67	1277 00			2 2				REGULAR	1,282.00	1,206.55	1,296.70	1,517.75	700.60	1,281.97	
		OUDON COUNTY	220 10	15.70	l											345.80	Ļ.				∠	DEMIC													3			LOUDON COUNTY	DEMO				L			L
			109 30	L	L	1	L	1	\perp		⊥	╀	L	Ц		2 049 40	L.,			-		40.00 3K	188 25	L	L	180,90		4	4	177.55	┸	187.85	Ц	00000		-		_	Į	L	L	L	L	L	Ц	L
		CITY OF LENOIR CIT		37.50		L	ļ	l	8 2	1	1	ļ.	L	Ц		524.95	_				CITY OF LENOIR CIT	DEMIC	5E 7E	L	L	L	Ц	_	╛	4.45	1	117.55	Ц	20.000	1			CITY OF LENOIR CIT	DEMO		L	L	L	L	38.80	
_		פֿוּ	4	507.25	1	404 80	1	Ĺ	468 70	L	1	L	L	0 445.40	\downarrow	5 5 459 15	- -					X	1	L	L	\$ 409.15	Ll	398 45	4	20,128	L	17.17	Ц	97 000	-			- 1		<u>!</u>	L	Ш	L	L	Ц	
			OF L	ľ		L	L	┸	24.42	L	L	L	L	5 43.00	\downarrow	306.25	L				CITY OF LOUDON	٦.,	1	L		L	Ц	13,70		28.40	ļ	30.50	Ц	2000	\downarrow			CITY OF LOUDON	DEMO	_	L	34.35		L		
		0140	200	241.30	ļ	╀	191 80	240.45	222 30	70 701	220.15	209.95	226.35	238.65	+	2.687.20					5	70.46	260.65	╀	ļ.,	219.2	236.15	218.8	185.6	87.75	0 602	235.70		20 07 4 5	7.740.3	L		CITY	BLC:: AB	235.90	H	232.05	228.5	232.75	215.6	
1	\parallel	+	ļ.	ALKELIST	SEPTEMBER	TOBER	NOVEMBER	FCEMBER	ANITARY	VEL POLITON	MARCH	APRIL	MAY	JUNE		TOTAL					1	>==	AUGUST	SEPTEMBER	XTOBER	NOVEMBER	DECEMBER	ANUARY	EBRUARY	MAXCA	, A.	GNE		101	₹	-		†	<u> </u>	יייר	*UGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	

.

Σ <u>Σ</u> ...

	YOTA	TONS	4 407 84	1	Ц	5,208.65	\perp		L	Ц	1	6.088.45	Ш	63,304.65				TOTAL	٤		1	Ц	┙	L	Ц	1	5,550.65	_ _	58 011 40	L			TOTAL	TONS	L	[ŀ	1	6.391.03	10,383,05	9,687,04	12,022.69	L	Ц	
		ASBESTON				8 8						8 8		6.35					TS BEST								4.60		9	3				ASBESTOS				80			GO 7		9.65		
		INDUSTRIAL ASBESTOR	1 888 65	1,275,90	2,191.15	2,332.85	2.306.30	2,687.10	2,621.90	3,429,10	2,449.85	2,809,25		27,755,00				23	INDUSTRIAL	2,688.95	2,793.50	2,253,70	2,803.20	2,277.05	2,623,90	2 678 75	2,403.20	2,556.85	11 035 85	20,200,10			97	INDUSTRIAL	2,532.80	2,444.15	2,888.30	3.776.50	3.689.40	7,243.15	A 178 76	8,291.70	5,755.20	4.940.77	
	SUB-TOTAL S	DEMO	1	Ì	Ш	1	1	ı			1	139.65		1,218,30	38,579.70			SUB-TOTALS	DENIG	189.80	121,15	158.25	181.15	282.20	302.25	302.85	163,75	195.35	2 578 50				SUB-TOTAL	DEMO	142.80	114.75	203.13	196.15	327.28	138.40	199.40	264.29	591.39	947.24	_
		RECULAR	2.891.65	2,657.20	2,726.55	2,783.70	2.452.00	2,741.25	2,270.30	2,917,18	9 6	3,319.55		34,325.00	REGULAR			Ĺ	RECULAR	3 140.00	2,930.50	2,753.05	2,104,10	2,699.15	2,962.30	3.441.95	2,979.10	3,317,20	34 414 71					REGULAR	3,178.10	3,535,50	2714 15	2,956.75	2,374.35	05,100	2 901 50	3,486.70	3,475.05	3,282.80	
	97	ASIBERTOS	0.70			90				58				6.35				53	ASBESTOS								4.80		8				92	ASBESTOS			0.70			١	7				
	OTHER USER	DEMO	↓			1	L	L	Ш		l	79.45		721.55				OTHER USERS	DENIO		L	Ш	102.80	Ц	LL		59.15		0.00	-			THER USER	DEMO		-1		1 - 1	Н	1	ŀ	170.84		- 1	
		RECULAB	ŀ	ıı	- 1	- 1				_Ĺ		146.45		1,983,29					ä	1	1	11	[Ιİ	1	1	255.60	1.	0.00	₩			ō	RECULAR	324.45	518.05 57.5	140.15	363.50	201.60	2 2	200.70	208.10	214.20	368.00	
	METAL RESOURCES	INDUSTRIAL.	1,471.00	1,079,10	1 928 05	2.053.60	2,090,05	2,462,25	2,381.55	3.148.90	D/ 181 7	2,373,20		25,029,75				METAL RESOURCES	INDUSTRIAL.	2,643,63	2,545.05	2,066.60	2.208.60	1,861 45	2.517.20	2,311,00	2,241.35	6,315.55	27.913.55				ESOURCES	REGULAR INDUSTRIAL	2,343,85	2,230.35	2 437 20	2,800.10	2,217,70	7 494 70	2 739.01	3,199.04 208.10	2,939,99	2,972,31	
	METALR	REGULAR		15,25										15.25				METAL R	RECOLUR										000				METAL R	REGULAR										5.40	
RS 16-89	CLARK	NDGSTREAL					ĺ							000		00	2 2	CLARK	INDUSTRIAE									-	000		TOMERS	Year 90-91	CLARK	I' DESTRULL		980 45	1 2	896.40	1,259.50	3 771 45	3.208.05	4,871.16	2,612.41	1,767.51	
LARGEST CUSTOMERS	MOVERS KIMBERLY-CLARK	RECULAR												8		APCEST CHSTOMEDS	Toursers for Fixed Year 1989-90	KIMBERLY-CLARK	REGULAR								30.0	7	0.25		LARGEST CUSTOMERS	Tonnages for Flacal Year 90-91	TN WASTE MOVERS KIMBERLY-CLARK	REGULAR					23.55	108.25	112.35	69.05	91.40	110.75	
LARGEST C	MOVERS	DENIO	4.80	27.70	23.85	21.80		15.05	53.10	26.30	45.75	42.05		338.75		PORST	darts for Fis	MOVERS	DENIO	18,00	22.10	30.55	27.40	102.60	17.00	130.40	30.95	11	608.15		LARG	Tonnage	MOVERS	DENCO			33.05	L		20.50	-	Ш	6.45		
Tonna	TN WASTE	REGULAR	240.10	244.80	301.05	314.50	308.25	380.55	243.85	318.40	343.70	428.95	Ī	3,787.25			ع اد	TN WASTE	NECULAR 170 40	419.05	480.60	412.00	435.78	590.55	531.90 788.30	389.05	360,35	200.30	5,121.58				TN WAST	RZGULAR	347.90	07.17	419.85	438.70	377.20	423.15	343.50	388.35	355.45	496.60	
		INDUSTRIAL	217.65	196.80	263.10	98.80	218.25	224.85	240.35	282.20	207.60	236.05		2,725,25					NDI STEME	195.85	248.45	187.10	276.60	415.60	218 75	265.75	161.85	20.15	3,122.10					INDUSTIRLAT.	213.80	158.05	25.25	232.00	212.20	223.35	231.20	221.50	202.80	CA.002	
	R REFUSE	DEMO												0.00				R REFUSE	DENIO										0.00				R REFUSE	0\$%20									21.0	9.75	1
	VOLUNTEER REFUSE	RECULAR	1.924.00	1,586.15	1,609.95	1,246.55	1 330 55	1,480.35	230.60	2,331,50	2.019.85	1,929.85		20,211.21				VOLUNTEER REFUSE	4 847 15	1,485,95	1,483,75	1,502.70	982.03	1,073.50	1,287,25	1.928.05	1,515,35	2011	17,089.78				VOLUNTEER REFUSE	RECULAR	70.00	1,348.70	1,362,60	1,268.95	1,055.20	1.448.45	1,427.90	1,918.45	1,913.70	1,316.U3	
		ASBESTOS												0.00			-		ASBESTOS										000				UNITY	ASBESTOS									5.85	3.03	
	Ü	DEMO						800						0.00				LOUDON COUNTY	DENIO					0.90	117.80	Ц			118.80				-51	DENIO			L	9.05				Ц	380.30	1	
		REGULAR							800					000				-1	XECULAR				L	_		LI	196.65	Ц	1,339.90					RECULAR		L	170.70	Ш.	133.85	L		Ц	\perp	1.	
	CITY OF LENDIR CIT	DENIO			3.70			8.0	1				<u> </u>	5.50				CITY OF LENOIR CIT	OKAO		H	Ì				ij	35.60	11	333.15				ENOIR CIT	DEMO	1	1		Н		L		68.95	1		
	CITY OF L	REGULAR	Ш	Ц.	1.		i	\$21.15		-		561.60		5.548.20				CITY OF L	١.	L	LL	_L	Ш		_L	Ш	431.95	ш	5,502.55				CITY OF I	REGULAR	02 20	475.50	412.20	477.90	391 10			463.20	Ł		
	CITY OF LOUDON	ОЕМО	Ш	_L		6.55		1	\perp	9 35	L	Ц	Ш	152.50									L		L	Ш	21.05	Ш	129.15				CITY OF LOUDON CITY OF LENOIR CIT	DEMO	15.40	ı	l		┸	L	L	28.50	_	L	4
	CITY OF	REGULAR	232.50	24.68	21.05	228 20	237.65	236.95	213.50	242.30	206.50	254.70		2,779.80		L		CITY OF		L	4	218.30	209.40	222.90	205.30	220.75	219.20		2,686.40				CITY OF	REGULAR	243.70	246.80	208.35	230.20	191.85	213.75	199.15	230.60	230.75	741.02	
	-	+	JULY	AUGUST	OCTOBER	EMBER	EMBER	UARY	SKOARY SKOARY	APRIL	-	ENE	$\prod_{i=1}^{n}$	TOTAL	\parallel	+		+	Y X X	AUGUST	TEMBER	CBER	EWBER	UARY	MARCH	ب	MAY		TOTAL		-	-	-	-	AUGUST	TEMBER	roeer	NOVEMBER	EMBER	FEBRUARY	ÇH ÇH	Ħ	MAY.	_	1

NED McWHERTER GOVERNOR

June 6, 1994

Mr. Wayne Tolbert, Chair Loudon County Solid Waste Disposal Commission 100 River Road #109 Loudon, TN 37774

Dear Mr. Tolbert:

Thank you for your recent correspondence regarding the request for adjustment to 1989 waste generation baseline data for Loudon County s Regional Solid Waste Plan. I appreciate your information.

The responsibility for oversight and administration of the state's solid waste plan has now been transferred to the Department of Environment and Conservation, Division of Solid Waste Assistance. I will forward your information to the Department. Please address all future correspondence regarding Loudon County's solid waste planning efforts to Commissioner J. W. Luna or Mr. Paul Evan Davis, Department of Environment and Conservation, 21st Floor L & C Tower, Nashville, TN 37243.

If I can be of further assistance, please do not hesitate to let me know.

Sincerely,

Carol White

Executive Director

CAROZ White

Tennessee State Planning Office

CW/tlw



STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION NASHVILLE, TENNESSEE 37243-0435

NED McWHERTER GOVERNOR

J. W. LUNA

June 22, 1994

Wayne Tolbert, Chairman Loudon County Solid Waste Disposal Commission 100 River Road #109 Loudon, TN 37774

Dear Mr. Tolbert:

We have received your request for a per capita disposal rate adjustment to Loudon County's solid waste base year data. From the documentation provided, it appears that you have a valid concern for adjusting the base year data. Therefore, Loudon County's base year data is approved to reflect an annual per capita disposal rate of 2.16 tons.

If we can be of further assistance on this or any other matter, please do not hesitate to contact us.

Sincerely,

Paul Evan Davis

Director

Division of Solid Waste Assistance

Saul Eran Davis

PED:GHD:dhm

cc: Mitch Loomis, ETDD

APPENDIX C

Public Participation Activities

Documention of public participation activities during development of the regional plan.

Two public workshops were held in the fall in 1993 and the spring of 1994. Two public meetings were held in July 1994 to summarize the plan and receive public comment. The attendance lists are attached.

Also attached is the survey results of Loudon County citizens opinions on solid waste planning and management.

Public meeting

March 29, 1994

Peggy Douglas

Basey Baxer

Cherye Dunson

Buth Burklin

Mather Back

Representant
Par consultant
howown
Santek
LCSWDC
News Hook

Josep Plem

alt

ATTENDANCE SHEET

PLEASE SIGN IN

LOUDON COUNTY SOLID WASTE DISPOSAL COMMISSION PUBLIC WORKSHOP FOR 10-YEAR SOLID WASTE PLAN

DATE: JULY 16, 1994 10:00 AM

LOCATION: VISITORS CENTER, LENGIR CITY

272.247	
NAME	REPRESENTING, OR REASON FOR ATTENDING
Beth Burklin	LCSWDC assistant
DOE SIMS	
Mitchell D. MARTINI, Jr	Coursi The
Mot + Karen Roberton	West-Hod L
ALBINT A. JONOW Sa Blit Refres	LESNOC -
BaryBulle	C.M. Dedon
aslew Longmine	LISWOC
Wayne Tollet	LCSWDC
HELON DOVERS	consultant

ATTENDANCE SHEET

PLEASE SIGN IN

LOUDON COUNTY SOLID WASTE DISPOSAL COMMISSION PUBLIC WORKSHOP FOR 10-YEAR SOLID WASTE PLAN

DATE: JULY 21, 1994 7:30 pm

LOCATION: LOUDON CITY HALL

NAME	REPRESENTING, OR REASON FOR
	<u>ATTENDING</u>
Beth Burklin	LCSWDC assistant
BARRY BAKEIR	LOUDON (CIM OF)
MAH Kherkon	News-Hoold
Cheryl Durson	Santek Envisor mental
TUAR CARLSON	ADVISORY COMM
aleen Lorgnine	LCSWDIC
Donald R. Face	LCSUDC
ED PUTKONEN	Average citizen
Elephonie Publishen	ti di
ann D. Hammoultes	Fordon Co. Beaulification B. Olde
	Co,

FOR IMMEDIATE RELEASE

On 10-year waste management plan Solid Waste Commission Seeks Public Input

LOUDON, Tenn. - The Loudon County Solid Waste Disposal Commission is seeking members of the public to serve on a municipal advisory committee to provide input into the county's draft 10-year solid waste management plan.

The state-mandated committee can also share a role in the plan's implementation.

"We would welcome any Loudon County citizen's participation on this committee," said Commission Chairman Wayne Tolbert. "The commission can make decisions about which direction our county should take with its solid waste management program, but public input about our decisions strengthens the plan."

Tolbert said there's no rule regarding the number of committee members, but ideally he said the commission would like to see a cross section of people that represents the entire community.

"Obviously, people from the business sector would be an asset on the committee as would people in the environmental and educational fields," Tolbert said. "We also want input from concerned residents and anyone who has any particular experience in the solid waste and civil engineering arenas."

The role of the committee is to review the plan and make specific comments and suggestions about its direction and implementation. The key to making the plan successful, he added, is education - an area in which the committee could have its greatest impact.

"The waste reduction and public education mandates that the state has placed on local governments is something that won't be achieved without public participation," he said.

INPUT - ADD ONE

"Members of the advisory committee can assist us with the accurate dissemination of information about our solid waste program. Every effort constitutes a step towards implementing a comprehensive solid waste management program countywide."

Tolbert said citizens interested in serving on the committee should call the commission's administrative assistant, Beth Burklin, at 966-6097 or 458-4665.

- 30 -

For More Information Contact:

Wayne Tolbert (615) 481-8703

Beth Burklin (615) 966-6097 (615) 458-4665

10-YEAR PLAN MAILING LIST

COUNTY COMMISSION CANDIDATES

Sarah Simpson Bivens 5456 Harrison Bend Road Loudon, Tennnessee 37774

William Bryant Howard III 8069 Watkins Road Loudon, Tennessee 37774

Don Lane 507 West Broadway Lenoir City, Tennessee 37771

Eric Thomas 500 West Tenth Ave. Lenoir City, Tennessee 37771

Jerry Masingo 201 Oak Street N. Greenback, Tennessee 37742

Roy H. Bledsoe 800 Sunnyside Road Philadelphia, Tennessee 37846

Harold Duff 2500 Dixie Lee Circle Lenoir City, Tennessee 37771

Jerry W. Park 1280 Hwy 321 N. Lenoir City, Tennessee 37771

Ken Shockley 19301 Martel Road Lenoir City, Tennessee 37771

Curtis Alan Williams, Jr. 3770 Duncan Road Lenoir City, Tennessee 37771

Ben Surrett P.O. Box 294 Loudon, Tennessee 37774

Lee Ledbetter 403 E. 2nd Ave. Lenoir City, Tennessee 37771 Earleana Maples 609 D St. Lenoir City, Tennessee 37771

Bob Smith 6685 Browder Hollow Road Lenoir City, Tennessee 37771

Mary Williams 402 E. Hotchkiss Valley Road Lenoir City, Tennessee 37771

COUNTY EXECUTIVE CANDIDATES

George Miller 427 Bailey's Road Greenback, Tennessee 37742

Joe Sims 502 W. 2nd Ave. Lenoir City, Tennessee 37771

LOUDON CITY COUNCIL

Mayor Bernie R. Swiney 101 Harrison Bend Road Loudon, Tennessee 37774

Vice-Mayor Eugene Lambert 1014 Mulberry Loudon, Tennessee 37774

Randel Johns 732 Ferry Street Loudon, Tennessee 37774

Michael Cartwright 1119 Huffland Drive Loudon, Tennessee 37774

James Thomas 1001 Freedman Street Loudon, Tennessee 37774

LENOIR CITY COUNCIL

Mayor Charles T. Eblen Lenoir City Hall 600 E. Broadway Lenoir City, Tennessee 37771

William F. Toby Cheatham 1272 Simpson Road E. Lenoir City, Tennessee 37771

I.D. Babe Connor 1103 West Broadway Lenoir City, Tennessee 37771

Gerald Gene Hamby 700 W. 6th Ave. Lenoir City, Tennessee 37771

Douglas R. Buddy Hines 301 C. Street Lenoir City, Tennessee 37771

Thomas A. Mc Nabb 362 West Hills Drive Lenoir City, Tennessee 37771

SANTEK

Cheryl Dunson Santek Waste Services 1306 South Lee Hwy Cleveland, Tennessee 37311-5863

ADVISORY COMMITTEE

Ivar D. Carlson 210 Kiyuga Lane Loudon, Tennessee 37774

Harry Gillman Tennessee Waste Movers P.O. Box 397 Lenoir City, Tennessee 37771

Mitchell D. Martin Jr. P.O. Box 335 Loudon, Tennessee 37774

Ann Hammontree 100 River Road #104 Loudon, Tennessee 37774 Gerald Moore 21881 Hwy 72 North Loudon, Tennessee

Ray Purdy 21884 Hwy 72 North Loudon, Tennessee

J.C. Steed 22944 Hwy 72 North Loudon, Tennessee

Mrs. Ben Gaylon 29045 Hwy 72 North Loudon, Tennessee

Ted Lynn 16739 Prospect Road Loudon, Tennessee

Don Trollinger 26755 Hwy 72 North Loudon, Tennessee

Edward Headlee PO Box 356 Loudon, Tennessee

Ann Hammontree Loudon County Beautification Board 100 River Road #104 Loudon, Tennessee

LOUDON COUNTY SOLID WASTE SURVEY-CITIZEN'S OPINIONS ON SOLID WASTE MANAGEMENT OPTIONS

Prepared for the Loudon County Solid Waste Disposal Commission by Peggy Douglas, Ph.D.

December 13, 1993

Introduction

In consultation with the Loudon County Solid Waste Disposal Commission, Dr. Peggy Douglas devised a methodology to ascertain the opinions, attitudes, preferences, and background attributes of citizens of Loudon County with respect to solid waste management issues facing the region. Trained personnel conducted a random telephone survey of 449 residents. This sample size means that the results obtained have a 95 percent probability of being within four percentage points (plus or minus) of the opinions, attitudes, and preferences of all Loudon County residents.

The survey was conducted during the week of December 3 through December 10, 1993 between the hours of 6:00 pm and 8:30 pm Monday through Friday or 1:00 pm and 6:00 pm Saturday and Sunday. Each telephone number in the original sample was tried a total of three times before a substitute number was made. The sample is generally representative of all Loudon County residents in terms of demographic information.

Summary of Findings

1. Responsibility for solid waste disposal

Loudon County residents feel that local government should be primarily responsible for the disposal of solid waste.

2. Information sources

Loudon Countians choose the library, local government, and newspaper as the primary sources of information about solid waste.

3. Garbage Collection

Fifty percent of Loudon County residents have curbside collection. Only 26 percent use the convenience center. Thus, almost 1/4th of the county is not adequately served by collection services. Eighty-one percent of the residents feel that Loudon County needs more convenience centers.

4. Recycling

When asked how solid waste options should be prioritized, most Loudon County residents said that recycling should be the top priority. About one-half of Loudon County residents currently

recycle. The residents that do not recycle say that the primary reason is that it is not convenient. The overwhelming majority of residents say that supermarkets are their preferred location for a recycling drop-off center.

5. Financing Solid Waste Services

Forty-two percent of Loudon County residents pay a fee to private haulers for garbage collection. Twenty percent responded that they pay for garbage service through city or county taxes. Twenty-four percent of the residents think that garbage service is free (an obvious opportunity for educational efforts).

When told that solid waste costs would be increasing due to new state and federal regulation, most Loudon County residents felt that the increased costs should be finances with local taxes. Twenty-nine percent were willing to pay a monthly fee to cover the

additional costs.

6. Landfill disposal

Since most Loudon Countians feel that the local government should be responsible for solid waste disposal, one might infer that residents prefer public vs. private ownership. Seventy-four percent stated that a new landfill should be located in Loudon County. Given the scenario that the cost savings would be around \$45 per household annually, residents slightly preferred the option of a 300 tpd over a 100 tpd landfill. It should be noted, however, that in the actual bids for the landfill contract, the cost differential between a 100 tpd and a 300 tpd was only about four dollars. Thus, one could not infer from this survey that residents have a preference toward a particular sized landfill. Clearly, the most important message that residents gave in the survey was for the county to retain control over its waste. Building a transfer station and exporting Loudon County's waste was not a popular option among residents.

7. Eighty-five percent of Loudon County residents indicated that they would participate in a one-day household hazardous waste collection event financed by the state of Tennessee.

Individual Questions

1. Which of the following SHOULD BE PRIMARILY RESPONSIBLE for the disposal of solid waste?

1.	National government	7.3%
2.	State government	12.0%
3.	Local government	24.1%
4.	Private industry	16.3%
5.	all of them	27.6%
6.	DK/NA	12.7%

If you wanted to know more about solid waste, what would be your source of information? [CODE THEIR RESPONSE-DO NOT READ LIST] 1. Library 18.3% 2. Newspaper 14.7% 3. T.V. 8.5% 4. Magazine/Journal 2.4% 5. Friends 5.3% 6. Local Gov't 17.6% 7. State or Fed. Gov't 7.8% 8. Other 7.6% 9. DK/NA 17.8% How do you currently dispose of your garbage? 3. 1. Curbside or backdoor collection 50.3% 2. Take it to a Convenience Center in Loudon Cty 26.5% 3. Take it to a Convenience Center in another cty 9.8% 4. Bury or burn on my own property 8.9% 5. OTHER 3.3% 6. DK/NA 1.1% 4. Do you think Loudon County needs more convenience centers for residents to dispose of garbage? 1. yes 81.3% 2. no 10.7% 3. DK/NA 8.0% Do you currently recycle any of your waste at a DROP-OFF CENTER? 1. yes 49.2% 2. no 50.1% 3. DK/NA .7% NOTE: IF RESPONDENT ANSWERED NO TO QUESTION 5, ASK QUESTION 6 IF RESPONDENT ANSWERED YES TO QUESTION 5, SKIP 6 6. Why are you NOT currently taking your recyclables to a DROP-OFF CENTER? 1. It's not convenient 57.4% 2. It's not available 19.2% 3. Don't know where to recycle 16.4% 4. I don't believe in recycling 2.2% 5. I have curbside recycling 4.0% 6. DK/NA 1.8% 7. If you ARE WILLING to take your recyclable materials to a CONVENIENT drop-off recycling center, which would be your preferred location: 1. Supermarket 51.2% 2. Recreation Center 5.8% 3. Convenience Center 12.7%

4. Church	5.1%
5. Other	12.7%
6. DK/NA	12.5%

NEXT, I'M GOING TO ASK YOU SOME QUESTIONS ABOUT HOW YOU THINK WE SHOULD PAY FOR SOLID WASTE DISPOSAL COSTS

How do you pay for garbage service (THIS IS OPEN-ENDED, DON'T PROMPT WITH ANSWERS)?

1. SUBSCRIBE TO A PRIVATE HAULER	42.5%
2. THROUGH MY CITY OR COUNTY TAXES	19.6%
3. GARBAGE SERVICE IS FREE	23.8%
4. OTHER	7.6%
5. DK/NA	6.5%

In Tennessee, we have new solid waste regulations that require counties to upgrade garbage collection services, provide recycling services, and improve landfills. These regulations protect the environment, but will cost counties more money to manage solid waste. It has been suggested that ALL COUNTY RESIDENTS AND BUSINESSES should pay a monthly fee for these extra costs of solid waste disposal. How do you think we should pay for the extra costs?

1.	Monthly	garbage service fee	28.7%
2.	General	Tax Revenues	24.1%
3.	Special	waste disposal tax	17.6%
4.	DK/NA		22.9%
5.	OTHER		6.7%

- 10. Even if Loudon County has a recycling program, much of solid waste cannot be reused and must be disposed of in a landfill. At present, the LOUDON COUNTY SOLID WASTE DISPOSAL COMMISSION is considering THREE options for landfilling garbage:
 - 1) To upgrade and expand the existing landfill in Loudon County to dispose of Loudon County's waste ONLY. This would cost Loudon County taxpayers about \$113 per household a year,
 - 2) To cooperate with adjacent counties to build a regional landfill IN Loudon County to share costs and dispose of cooperating counties' waste together. This would cost Loudon County taxpayers about \$68 per household a year.
- OR 3) To cooperate with adjacent counties to build a regional landfill OUTSIDE of Loudon County to share costs and dispose of cooperating counties' waste together. This would cost Loudon County taxpayers about \$91 per household a year.
- In a choice between (#1), (#2), and (#3), which do you prefer? 1. A landfill for Loudon County ONLY
 - even if I have to pay more.

OR

2. A Multi-county landfill located IN

33.4%

	Loudon County because it is the lowest co 3. A multi-county landfill located OUTSID		41.0%
	of Loudon County even Loudon County even		
	more than IF Loudon County hosted the lan		15.8%
	4. OTHER		2.4%
	5. DK/NA		7.3%
11.	Given all the solid waste services that a County, which should be given the top pri		Loudon
	1. RECYCLING	35.4%	
	2. GARBAGE COLLECTION	11.6%	
	3. EDUCATION ON WASTE REDUCTION	14.0%	
	4. LANDFILLS	26.3%	
	5. OTHER	2.2%	

12. The State of Tennessee now provides grants for counties to collect and dispose of household hazardous waste. If the County offered an annual one-day event to collect HOUSEHOLD HAZARDOUS WASTE, would you be willing to take your old paint products, pesticides, and automotive products to a central location where the waste could be packed and shipped to a hazardous waste landfill AT NO COST TO YOU.

1. Yes 85.3% 2. No 8.5%

3. DK/NA 6.2%

Now I'm going to ask you some questions so that your responses can be compared to those of others. Again, YOUR ANSWERS ARE COMPLETELY CONFIDENTIAL.

13. Do you own or rent your home?
1. own
2. rent
22.5%
3. DK/NA
2.7%

- 14. In what year were you born [CODE AGE]
 - 1. 18-30
 - 2. 31-45
 - 3. 46-60
 - 4. over 60
 - 5. DK/NA
- 15. What is your race?

1.	Black		•	5.1%
2.	White		**	85.7%
З.	Other			5.8%
4.	DK/NA	•		3.3%

16. How many years of school have you completed?1. some high school9.8%

 high school grad some college college grad some grad school other dk/na 	30.7% 30.5% 18.0% 4.7% 3.6% 2.7%
17. How many people live in your house 1. 1-2 2. 3-5 3. 6-7 4. OVER 7	
18. Which of the following best described all sources in 1988. [READ QUICKLY 1. Under \$10,000 and \$20,000 3. Between \$20,000 and \$30,000 4. Between \$30,000 and \$40,000 5. Over \$40,000 6. DK/NA	Y!] 8.2%
19. Do you live in Lenoir City, Loudon, 1. Lenoir City 2. Loudon 3. Outside Lenoir City and Loudon 4. DK/NA 20. CODE RESPONDENT'S GENDER 1. Female 2. Male 3. DK/NA	31.8% 21.6%

APPENDIX D

Exports and Imports

If the region plans to meet all or part of the projected demand for treatment and disposal capacity by exporting waste to another region, document the concurrence of the impacting region. Appropriate documentation includes:

- 1. a resolution adopted by the administrative board of the receiving region agreeing to accept waste from the exporting region;
 - 2. a fully executed interlocal agreement;
 - 3. a contract;
 - 4. other legal documentation

NO IMPORT/EXPORT AGREEMENT EXISTS. LOUDON COUNTY PLANS TO OPERATE AS A SINGLE COUNTY FOR ALL SOLID WASTE MANAGEMENT NEEDS.

APPENDIX E

Review by Appropriate Municipal or Regional Planning Commission

To demonstrate that the regional solid waste plan has been submitted to the appropriate local planning commissions for review and adoption, please submit either:

- 1. a copy of the minutes of the commission meeting recording submission and review of the plan; or
 - 2. a resolution adopting the regional solid waste plan



County of Loudon

GEORGE M. MILLER

COUNTY EXECUTIVE

100 RIVER RD. #106

LOUDON, TENNESSEE 37774

PH. 458-4664

November 22, 1994

Mr. Paul Evan Davis
State of Tennessee
Department of Enviornment and Conservation
Solid Waste Assistance
401 Church Street
Nashville, TN 37243

Dear Mr. Davis:

Mr. Wayne Tolbert, Loudon County Solid Waste Commission, recently contacted my office concerning a correction in the minutes of the September 13, 1994 Loudon County Commission Meeting. According to the minutes of the meeting, the Solid Waste 10 Year Plan was only discussed. Due to an oversight when the minutes were approved they were adopted with this error. I will ask that the County Commission consider a correction at the next County Commission Meeting on December 5, 1994, which reads:

"The Ten Year Plan, proposed by the Solid Waste Disposal Commission was passed with the amendment that a committee be formed to investigate the possibility of creating a local approval process for any new applications for industrial or commercial waste streams that require state approval".

I feel sure this correction will be approved as proposed.

Sincerely,

Desyll, Miller George M. Miller

CC: Mr. Wayne Tolbert





County of Loudon

GEORGE M. MILLER

COUNTY EXECUTIVE

100 RIVER RD. #106

LOUDON, TENNESSEE 37774

PH, 458-4664

TO:

COUNTY COURT CLERK, RILEY WAMPLER

FROM:

FINE GEORGE MILLER, COUNTY EXECUTIVE

DATE:

NOVEMBER 23, 1994

SUBJECT:

COUNTY COMMISSION AGENDA

The Agenda for the County Commission, scheduled for December 5, 1994 at 7:00 P.M. is:

- 1. Appointment of Constable for 2nd District Vacancy.
- 2. Report from Committee on naming of Courthouse Annex.
- 3. Consideration of Appointment to Solid Waste Disposal Committee.
- 4. Consideration of Appointment of Bobby Lewis (replacing Howard Luttrell) to E-911 Board.
- 5. Consideration of Appointment of Commission representative to Loudon County Chamber of Commerce.
- 6. Possible Consideration of Resolution pertaining to payment for clean-up of fuel oil spill at new National Guard Armory.
- 7. Consideration of correction of minutes--County Commission Meeting of September 13, 1994.

Under List of Reports:

Road Commissioner--Don Palmer

Doug Berry--Consideration of Request to sale approximately two acres in Blair Bend Industrial Park for distribution-warehouse facility.



A Public Hearing was held at the Loudon County Courthouse on September 13, 1994 at 6:00 P.M. for the purpose of:

Amendment to the Zoning Resolution of Loudon County, Tennessee, Atricle 7, Administration & Enforcement, Section 7.030 Building Permits. Proposed amendment will increase the building permit fee scheduled for residential, commercial and industrial uses.

There being no comment, the hearing closed.

Be it remembered that the Loudon County Legislative Body met in regular session with Chairman Bledsoe presiding and County Clerk, Riley D. Wampler was present whereupon Sheriff Tim Guider Opened Court, Led the Pledge of Allegiance to the Flag, and presented Chaplain, Gary Amos who gave the Invocation.

On Roll Call vote, the following Commissioners were present:

Bledsoe

Park Duff Masingo Simpson Maples

Ledbetter

Randolph

Twiggs

COMMISSIONER B" "DSOE JTED CHAIRMAN BY ACCLIMATION

COMMISSIONER MAPLES ELECTED CHAIRMAN PRO-TEMP BY ACCLIMATION

GREENBACK HIGH SCHOOL PRESENTED A SKIT

THE 10 YEAR SOLID WASTE PLAN WAS PRESENTED FOR CONSIDERATION

LUTION PPOINTING ANDOLPH TO THE OUDON CO. HAMBER OF OMMERCE PPROVED

ITY OF LOUDON PPROVAL OF UBLIC WORKS ROJECT PPROVED

It was moved by Commissioner Park and seconded by Commissioner Maples that Commissioner Bledsoe be nominated Chairman. It was moved by Commissioner Maples and seconded by Commissioner Randolph that nominations cease and he be elected by acclimation.

It was moved by Commissioner Randolph and seconded by Commissioner Twiggs that Commissioner Maples be nominated Chairman Pro-temp. It was moved by Commissioner Randolph and seconded by Commissioner Park that the nomination cease and that she be elected by acclimation.

Mr. Hank McGee of the Loudon County School System presented Commissioner Masingo who introduced a group of students from Greenback High School who presented a most imformative and enjoyable skit.

County Executive, George Miller presented the 10 year Solid Waste Plan for consideration. It was moved by Commissioner Twiggs and seconded by Commissioner Sarah Simpson Bivens that the Solid Waste Commission will appoint a Committee to investigate the possibility of creating a local approval process for any new applications for industrial or commercial waste streams that require approval. The vote was unanimous.

It was moved by Commissioner Masingo and seconded by Commissioner Maples that a Resolution appointing Ted Randolph to the Loudon County Chamber of Commerce be approved. (Term expiration 8-31-95) The vote was unanimous and it is attached hereto as REsolution No. 1A-94 Exhibit AA.

It was moved by Commissioner Park and seconded by Commissioner Randolph that the request from the City of Loudon for Approval of Public Works Project, which will be partically in the county, consisting of pumps, stations and sewer lines to portions of Matlock Bend Park be approved. The vote was unanimous and it is attached hereto as Resolution No. 2-94 Exhibit A.

UNANIMOUS VOTE TO APPROVE CITY OF LOUDON PUBLIC WORKS PROJCET - WATER SYSTEM

COMMISSIONER PARK & LEDBETTER MOVE REMAINING COMMITTEES BE APPROVED

RESOLUTION NO. 1-94 EXHIBIT A REAPPONTING GENE LAMBERT TO TRDA BOARD

PARKS TO STAY ON NEGOIATING all COMMITTEE

ROBERT LEWIS ELEVATED TO DIRECTOR OF EMA

COURTHOUSE ANNEX COMMITTEE FORMED

PATRICK PHILLIPS PRESENTS PLANNING REPORT

> COMMITTEE APPOINTED TO INVESTIGATE TRANSFERRING DOUG LAWRENCE TO PLANNING COMMISSION OFFICE

It was moved by Commissioner Randolph and seconded by Commissioner Park that the Request from the City of Loudon for Approval of Public Works Project, which will be partically in the County, Consisting of Water System Improvements to Serve Portions of Matlock Bend Industrial Park be approved. The vote was unanimous and it is attached hereto as Resolution No.3-94 Exhibit B.

It was moved by Commissioner Park and seconded by Commissioner Ledbetter tha the remaining Committees be approved. The vote was unanimous and are attach hereto as Resolution 1AA-94 Exhibit AAA.

It was moved by Commissioner Randolph and seconded by Commissioner Park tha Gene Lambert be reappointed to TRDA Board of Directors (Expiration date 8-1 2000). The vote was unanimous and it is attached hereto as REsolution No. $\underline{1}$ Exhibit A.

It was moved by Commissioner Massingo and seconded by Commissioner Maples t Commissioner Parks stay on the 911 negotating committee. The vote was unanimous.

County Executive, George Miller, reported that Robert Lewis has been eleva from Project Manager to Director of the EMA Office.

Concerning the Courthouse Annex, County Executive, George Miller appointed Commissioner Ledbetter, Commissioner Ted Randolph and Commissioner Sarah Simpson Bivens, making Commissioner Ledbetter Chairman of the Committee.

Loudon County Planning Commissioner Patrick Phillips reported the Consideration of Amendment to the Zoning Resolution of Loudon County, Ten amending Article 7, Section 7.030, Building Permits, as recommended by th Planning Commission establishing revised schedule of fees for permits. It moved by Commissioner Maples and seconded by Commissioner Park to leave fees as is at present Section 1, that the schedule of fees for commercial industrial, and residential buildings be ammended as follows:

- Comercial .08 per square foot of space up to 5,000 sq. ft. (1)
 - Residential .07 per square foot of floor space for the first 2,000 s plus .05 per sq. ft. exceeding 2,000 sq. ft.
- Utility warehousing .05 per square foot of floor space. Be it resolved, that this Resolution shall take effect immediately. On Call, the vote was unanimous and it is attached hereto as Resolution No. Exhibit D.

County Executive George Miller appointed a Committee Consisting of of Commissioner Twiggs, Duff, and Ledbetter making Commissioner Twiggs Chair to investigate the transferring of Doug Lawrence from the County Commiss to the Planning Commission Office

N' RIES AL KOVED It was moved by Commissioner Masingo and seconded by Commissioner Park that the Notaries be approved. The vote was unanimous and they are as follows:

Rhonda Presley, Elizabeth Ann Williams, Sandra Faye McCollum, & Vicki D. Chapman.

There being no further business, Court adjourned at 8:00 P.M.

County Executive

County Clerk

APPENDIX F

10—Year Disposal contract between the Loudon County Solid Waste Disposal Commission and Santek Environmental Services.

SANITARY LANDFILL OPERATION AGREEMENT MATLOCK BEND LANDFILL LOUDON COUNTY, TENNESSEE

THIS AGREEMENT made and entered into this Aday of April, 1994 by and between Loudon County Solid Waste Disposal Commission, Loudon County, Tennessee, a Commission duly established by an Intergovernmental Agreement between the City of Lenoir City, the County of Loudon and the City of Loudon, hereinafter referred to as the "Commission," and Santek Environmental, Inc., organized under the laws of the State of Tennessee and having its principal place of business at 1306 South Lee Highway, Cleveland, Tennessee 37311, hereinafter referred to as "Santek."

WITNESSETH

WHEREAS, Santek and the Commission have entered into a Sanitary Landfill Operation Agreement dated July 1, 1988 under the terms of which Santek has operated the Matlock Bend Landfill situated off Highway 72 and adjacent to the city limits of the City of Loudon ("Landfill") as more particularly described on Schedule A attached hereto ("Site"); and

WHEREAS, the City of Lenoir City, the City of Loudon and County of Loudon have created the Commission and delegated to it the responsibility for operating the Landfill for the purpose of receiving and disposing of solid waste generated in the City of Lenoir City, the City of Loudon, and the County of Loudon; and

WHEREAS, the Commission is developing the Landfill in separate phases, and since Phase 1 (as hereinafter defined) is nearly filled, the Commission needs to develop Phase 2 of the Landfill (as hereinafter defined); and

WHEREAS, the Commission issued a request for proposals for design, construction and/or operation of Phase 2 of the Landfill consisting of an additional 17.5 acres which will comply with Subtitle D, and after receipt of bids, the Commission decided to negotiate with Santek, the low bidder; and

WHEREAS, the Commission and Santek have negotiated this Agreement for Santek to complete the operations of the existing unused cell areas of Phase 1 of the Landfill covered by the original 1984 MCI plans of the Landfill as permitted by the State of Tennessee ("Phase 1"), to close Phase 1 and to design, construct and operate Phase 2 consisting of an area of approximately 17.5 acres and such additional acreage as may be required to handle the Waste Materials (hereinafter defined) generated in the City of Lenoir City, the City of Loudon and County of Loudon during the next ten (10) years ("Phase 2"); and

WHEREAS, Santek is qualified under the applicable laws, rules, regulations, and ordinances of the State of Tennessee and County of Loudon and the operational plans of the Landfill to operate, close and provide post closure care to Phase 1 as approved by the State of Tennessee Department of Environment and Conservation ("TDEC") from time to time, and to design, engineer,

construct, operate, close and provide post closure services to Phase 2 as approved by the TDEC from time to time.

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained herein, and of the consideration to be paid by the Commission to Santek and for the services to be rendered by Santek to the Commission, the Commission and Santek hereby agree as follows:

Phase 1 Operation and Closure. During the term of this Agreement, Santek shall have the exclusive right and responsibility to operate the unused cell areas of Phase 1 until Phase 1 is filled and closed in accordance with the provisions of this Agreement and the laws, rules, regulations, Permits and approved operational plans of the TDEC. Upon the filling of the unused cell areas of Phase 1, Santek shall be responsible for final closure of Phase 1 and for the post closure care during the term of this Agreement in accordance with the Closure Plan dated November, 1991 and approved by TDEC ("Phase 1 Closure-Post Closure Plan") including the shaping of the slopes, placing of soil on top and seeding and maintaining the slopes and top of Phase 1. shall test the existing monitoring wells semi-annually or more frequently as may be required by law. The existing parameters as set forth in the Phase 1 Closure-Post Closure Plan as of the effective date of this Agreement will be utilized.

2. <u>Development and Operation of the Site</u>.

Upon the effective date of this Agreement, Santek shall at its cost and expense design Phase 2, including completion of existing hydrogeological studies and civil engineering drawings and endangered species and wetlands studies utilizing state-of-the-art liner system techniques required by the Santek shall design an enlargement of Phase 2 to include TDEC. such additional acreage as may be required to receive and dispose of the anticipated volume of Waste Materials which will be generated in the City of Lenoir City, the City of Loudon and the County of Loudon during the term of this Agreement in an efficient and cost effective manner and submit the preliminary plans and specifications for such enlargement to the Commission for its approval, which approval shall not be unreasonably withheld. the Commission shall have any objections to the preliminary plans and specifications, it shall notify Santek in writing of its objections and specify the action required to satisfy its objections. If the Commission does not notify Santek in writing of any objections within twenty-one (21) days after receipt of the preliminary plans and specifications, such failure to object shall constitute approval. Upon approval of the preliminary plans and specifications of such enlargement by the Commission, Santek and the Commission shall cooperate in securing a permit from TDEC to enlarge Phase 2 in accordance with such approved plans and specifications. Santek and the Commission shall also cooperate fully with each other in the design of Phase 2 to satisfy such

anticipated stream of Waste Materials and maximize the capacity and operational aspects of Phase 2. Alternative design, construction and maintenance criteria, including manufactured bentonite systems and different leachate collection systems, will be considered in the process of completing the application to TDEC for the construction of Phase 2. The Commission shall be responsible for obtaining all necessary land use approvals and permits ("Permits") from the State of Tennessee and other authorities jurisdiction over the construction and operation of Phase 2, including all fees and charges related thereto. However, Santek shall cooperate fully with the Commission in obtaining such Permits to the extent requested by the Commission, which shall include, but not be limited to, the preparation of necessary hydrogeological studies and civil engineering drawings for the construction of the Phase 2. Within thirty (30) days of the effective date of this Agreement, Santek shall provide to the Commission a written estimate of the costs of assisting the Commission in securing the Permit; and Santek shall update such estimate and render to the Commission a progress report at the end of each month and provide an updated estimate of such cost to the Commission as soon as practicable after the end of each month. In the event Santek's costs of providing the Commission such assistance exceeds \$140,000, or material changes are required in the preliminary or final plans and specifications by applicable government parties which increase Santek's estimated cost of construction of Phase 2 by more than five percent (5%), the parties agree to negotiate in good faith an

increase in the fees payable to Santek to reflect such additional costs.

- (b) Upon the Commission's securing the Permit, Santek shall conduct the following activities at its sole cost and expense:
 - (1) Construct Phase 2 in accordance with the Permit and applicable laws;
 - (2) Furnish sufficient and appropriate personnel and equipment necessary for the lawful, workmanlike and efficient performance of the construction of Phase 2;
 - (3) Report to the Commission or its designee, at least monthly, the status of the design, engineering, construction of Phase 2 and any other relevant information reasonably requested by the Commission;
 - (4) Construct and install the appropriate facilities and other structures required under the Permit for the proper operation and maintenance of Phase 2; and
 - (5) Conduct any other pre-operational activity as required by the Permit for the proper operation and maintenance of Phase 2.
- (c) Upon completion of the construction of Phase 2, Santek shall operate Phase 2 in accordance with the Permit and applicable law including, but not limited to, the following:
 - (1) Place, compact (to the extent practicable) and cover Solid Waste received at Phase 2 in accordance with the Permits and applicable law in a manner to best achieve

operating efficiencies and maximum obtainable densities, including such techniques as spoils disposal, relocation of roads and the sequencing of space utilization within each major disposal cell;

- (2) Operate the entry gate and scale to Phase 2 in accordance with the Permit and applicable law, collect cash payments at the Landfill and pay any funds collected in cash to the Commission on a weekly basis, along with an appropriate accounting report of such funds; maintain daily usage records and report usage showing type and weight to the Commission daily via computer terminal; and deliver scale tickets to the Commission weekly;
- (3) Provide to the Commission or its designee a copy of all reports filed with TDEC with respect to the status of Santek's operations and compliance with the Permits and maintain on the Site a copy of such reports as well as a copy of the Permits;
- (4) Report to the Chair of the Commission or any other designated representative any violations of the Permit or applicable law with respect to which it has received notice, and with respect to such violations occasioned by acts or omissions of Santek, report all action taken or to be taken to correct such violations within seventy-two (72) hours after receipt of notice of violation and furnish to the Commission all written reports and evaluations of the operation of the

Landfill received by Santek from TDEC as a result of its inspections of the Landfill and the responses of Santek;

- (5) Furnish sufficient personnel and all tools, materials and equipment necessary for the lawful, skillful and workmanlike operation of the Landfill including the presence of a experienced and qualified supervisor whenever the Landfill is open for operation;
- (6) Test and analyze groundwater monitoring wells in conformance with the Permit;
- (7) Install, maintain and monitor Landfill gas collection and control systems in conformance with the Permit;
- (8) Maintain buildings, structures, and all other facilities, including the entry gate, scale, fences and other barriers, and other structures and improvements reasonably required for the operation of Phase 2 in accordance with the Permit or by the Tennessee Department of Health and Environment. The permanent structures and other improvements shall become the property of the Commission on the termination of this Agreement. Santek shall not be required to fence the Landfill;
- (9) Pay normal and standard charges for all water, electrical power, natural gas, and phone service utilized at the Landfill;
 - (10) Maintain all roads on the Site;
- (11) Provide a system for the collection and disposal of leachate released from Phase 2 at a cost not to

exceed \$150,000. This system may be a collect, pump and haul system or a force main system to the City of Loudon Wastewater Treatment Facility;

- operations are permitted at the Landfill unless (A) the person doing so has the approval of TDEC and the Commission, (B) such operations do not impede the normal routine disposal operations and (C) such operations are conducted by personnel working under the immediate and direct control of Santek;
- (13) Ensure that no open burning is permitted unless specific approval of the Commission has been received. Notwithstanding the foregoing, Santek shall have the right to burn brush and other timber associated with the construction of new areas of the Landfill;
- comprised of neighbors to the Landfill and other members of the general public to provide input to the Landfill's development and operation and meet with this committee periodically and host Landfill tours on an as-needed basis. Santek shall have no authority to obligate or bind the Commission to any agreement with the committee including an agreement to take any action or to expend or pay any monies. Santek shall act solely in an advisory capacity. Any action or restraint of activity shall be the sole responsibility of Santek unless the Commission shall expressly agree to it;

- (15) Any other obligation or activity required by the Permit as amended from time to time by the parties and applicable law and not specifically delegated to Santek pursuant to the terms hereof; and
- (16) On or before September 1 of each year during the term of this Agreement, report to the Commission the compaction and density achieved and air space used during the preceding July 1-June 30 fiscal year as well as the remaining air space capacity of Phase 2 as of the end of such fiscal year. Santek may provide the same report it provides to TDEC in satisfaction of this requirement.
- (d) During the term of this Agreement, the Commission shall be responsible for the following:
- (1) Billing and collecting all charges (other than cash charges paid at the Landfill) for Landfill usage;
- (2) Except as provided in subparagraph (3) below, all off-site utilities to and from the Landfill necessary for normal operations;
- (3) The treatment and disposal of leachate released from the Landfill and, to the extent the cost of providing a system to do so exceeds \$150,000, paying for the cost of such system in excess of \$150,000. However, before commencement of construction of systems to treat and dispose of leachate, Santek shall provide to the Commission an estimate of the cost. If such cost does not exceed \$150,000, Santek may proceed without further Commission approval.

However, if the actual cost exceed \$150,000, Santek shall secure the Commission's written approval of such costs.

- (4) Paying the fee imposed by the State of Tennessee on all Waste Material received by the Landfill, which is currently 85 cents per ton.
- (5) If it should decide to do so, constructing a fence around the Landfill.
- (e) So long as this Agreement is in full force and effect and the Commission shall not have exercised its rights to operate the Landfill as provided herein, the Commission agrees that Santek shall be the sole contractor operating the Landfill; and in the event Phase 2 is filled and closed prior to the end of the ten (10) year term, Santek shall design, construct and operate an extension in the same manner and upon the same terms and conditions as provided herein for the design, construction and operation of Phase 2. In the event the Commission decides to extend the Landfill by opening a new phase to handle Waste Materials which are not required to be placed in a Subtitle D Landfill, Santek agrees to design, construct and operate such extension in the same manner and upon the same terms and conditions (other than the amount of operating fee payable to Santek by the Commission) as provided herein for the design, construction and operation of Phase 2. operating fee payable to Santek shall be the amount set forth in Section 5 hereof. In the event that during the term of this Agreement, the Commission decides to contract out waste reduction services, the parties hereto agree to negotiate in good faith with

each other for the provision of such services. However, the Commission shall not be precluded from bidding and accepting the bid of any provider for waste reduction services.

3. <u>Materials to be Disposed Of</u>.

Santek shall accept, upon payment of fees as scheduled, all permitted waste materials ("Waste Materials") consisting of Solid Waste (as defined herein), any Special Wastes (as defined herein) and any Industrial Waste (as defined herein) created within the jurisdiction of Loudon County or any similar waste stream for which the Commission has permitted disposal in the Landfill. "Solid Waste" shall mean (i) all waste defined as solid waste by the Solid Waste Disposal Act or regulations promulgated thereunder and (ii) all waste defined as solid waste by the Division of Solid Waste Management of TDEC having jurisdiction over solid waste generated within Tennessee, except that the term solid waste:

- (a) is intended to mean and include only those substances which are normally expected to be disposed of by employing generally accepted sanitary Class I landfill disposal methods;
- (b) shall exclude Hazardous Waste and Bio-Medical Waste (other than autoclave biomedical waste; and
- (c) shall exclude radioactive waste and any radioactive sewage sludge.

"Special Waste" shall mean waste material that is not characterized as being either Hazardous Waste or Bio-Medical Waste, and is not

normally found in the household waste stream. Special waste is generally comprised of solid wastes that are difficult to handle, and which require special precautions because of the nature of the waste creates waste management problems in normal operations. Examples include asbestos, hospital wastes and sludges. "Industrial Waste" shall be defined to include Waste Materials and Special Wastes of an entity or person who produces more than five (5) tons of such Waste Materials per day. No hazardous waste as defined by the rules of health and environment, DSWN Chapter 1200-1-11 Governing Hazardous Waste Management in Tennessee will be accepted nor will toxic, volatile, nuclear or infectious materials be accepted. No liquid waste will be accepted. Special Wastes (as herein defined) which are hard to manage, or cause or could cause potential problems shall be disposed of in the Landfill only if approved by the Commission and special provisions are made for such disposal and are approved by the Department. Rule 1200-1-7.06 (2) (a) Item #10. Upon notice from the Commission or Commission Chair or the Commission's designated agent, Santek shall deny the entity or person designated in such notice the right to dispose of Waste Materials in the Landfill, whether for non-payment of charges or any other cause.

4. <u>Daily Operations</u>. Santek will keep the Landfill open a minimum of five and one-half (5-1/2) days per week during

the hours from 7:30 a.m. to 3:00 p.m. The Landfill will be closed for the following holidays:

New Years Day Memorial Day July 4 Labor Day Thanksgiving Day Christmas Day

Santek shall provide all required daily services in operating and constructing the uncompleted and unfilled cell areas of the Landfill including all required covering operation of the current permit as set forth in the 1984 MCI plan (as existing at the time of this Agreement). Santek shall at its entire expense provide for the transportation and sale of recyclable material collected at the existing Loudon County Convenience Center. Santek shall further cooperate with the Commission in establishing similar convenience centers for use of the residents of Loudon County, and if additional convenience centers are established, Santek agrees to provide the necessary support as is currently being provided at the existing Loudon County Convenience Center. On or before the first of each year, Santek shall provide to the Commission its estimate of such cost of transporting and selling recyclable material based upon the cost incurred in the current year. However, if the cost to Santek of providing such transportation and sale exceeds \$4,000 per year, the Commission agrees to reimburse Santek by the amount the reasonable cost of transporting and selling recyclable material exceeds \$4,000 per year. Santek shall not be responsible for collecting, sorting, storing, or monitoring the quality of recyclable material which shall remain the sole responsibility of

the Commission. Santek shall not be responsible for recyclable materials not acceptable to potential purchasers. All soil and materials available at the Landfill shall be available for use by Santek as part of the services in operating and constructing the uncompleted and unfilled cell areas at no charge or fee adjustment to Santek.

- 5. Fees. The Commission shall have the sole authority to establish the tipping fee to be charged to users. Except for Industrial Waste placed in Phase 1 for which Santek should receive a fee of \$15 per ton and Waste Materials placed in the Unlined Phase (as herein defined), the Commission agrees to pay to Santek during each July 1 June 30 ("Fiscal Year") an operating fee, subject to adjustment as hereinafter provided, based upon the amount of annual tonnage placed in the Landfill (excluding Industrial Waste placed in Phase 1 and Waste Materials placed in the Unlined Phase) as follows:
 - \$30.40 per ton on the first 54,600 tons of Waste Materials disposed of in the Landfill during such Fiscal Year
 - \$27.21 per ton on the next 13,650 tons of Waste Materials disposed of in the Landfill during such Fiscal Year
 - \$27.54 per ton on the next 13,650 tons of Waste Materials disposed of in the Landfill during such Fiscal Year
 - \$24.84 per ton on the next 13,650 tons of Waste Materials disposed of in the Landfill during such Fiscal Year
 - \$24.63 per ton on the next 13,650 tons of Waste Materials disposed of in the Landfill during such Fiscal Year
 - \$23.84 per ton on all tons of Waste Materials disposed of in the Landfill during such Fiscal Year in excess of 109,200 tons

In the event the Commission opens a new phase of the Landfill to handle Waste Materials which are not required to be placed in a Subtitle D Landfill ("Unlined Phase"), the Commission agrees to pay to Santek an operating fee during each Fiscal Year, subject to adjustment, as hereinafter provided, based upon the amount of annual tonnage placed in such Unlined Phase determined as follows:

Until the aggregate tonnage of Waste Materials disposed of in Phase 2 and the Unlined Phase during any Fiscal Year amounts to 40,950 tons, \$17.50 per ton

\$13.98 on the next 13,650 tons of Waste Materials disposed of in the Unlined Phase during such Fiscal Year

\$11.85 on the next 13,650 tons of Waste Materials disposed of in the Unlined Phase during such Fiscal Year

\$11.36 on the next 13,650 tons of Waste Materials disposed of in the Unlined Phase during such Fiscal Year

\$10.22 on the next 13,650 tons of Waste Materials disposed of in the Unlined Phase during such Fiscal Year

\$9.66 on the next 13,650 tons of Waste Materials disposed of in the Unlined Phase during such Fiscal Year

\$9.27 per ton on all tons of Waste Materials disposed of in the Unlined Phase during such Fiscal Year in excess of 109,200 tons

If Special Wastes are disposed of at the Landfill, such extraordinary items shall be disposed of at a negotiated tipping fee not less than the operating fee in effect at the time for Phase 2 or Unlined Phase, as the case may be, for the type of Waste Materials being disposed of.

Commencing on July 1, 1996 and on each subsequent anniversary ("Anniversary Date"), the fee payable to Santek shall be adjusted and revised based upon the Municipal Cost Index as -16-

published in the monthly issue of <u>American City and County</u> magazine to reflect changes in effect from April 1, 1994 as the base, in accordance with the following formula:

New rate = [prior rate] \times (1 + (Mn-Mi)/Mi) Where prior rate is equal to the rate in effect at the adjustment date, Mi is the Municipal Cost Index on the designated beginning date of the adjustment period and Mn is the Municipal Cost Index on the adjustment date.

As soon as possible after each Anniversary Date, Santek shall send to the Commission a statement setting out the prior rate, a Municipal Cost Index on a beginning date, a Municipal Cost Index on the adjustment date and the percentage increase.

Santek shall be entitled to an automatic increase in the fee equal to the amount of (i) any fee, surcharge, duty, tax or other charge of any nature imposed by the federal government, any agency thereof, the State of Tennessee, any agency thereof, or by any local government agency which is directly related to the Landfill and which is directed to or assessed against Santek, Phase 2, the Permit, or the Commission, whether as owner or permittee and which is payable solely by reason of the nature of the operations conducted by Santek and (ii) any other sales or service taxes of general application to the operation of Phase 2. Fees, surcharges, duties and taxes imposed upon all corporations in general shall not be the basis for a automatic increase in the operating fee payable to Santek. Fines, penalties, personal property taxes and business licenses shall not be considered to constitute a fee, surcharge, duty, tax or other charge for the

purposes of an increase in the fee. Such fee, surcharge, duty, tax or other charge may be passed through to all users by the Commission in the form of a tipping increase.

If Santek determines that the cost of construction of Phase 2 as permitted will increase by reason of the existence of solid rock or other unanticipated physical site characteristics such as karst terrain or if Santek determines that its cost of operating the Phase 2 will increase by reason of changes (after the date of this Agreement) in federal, state or local environmental or other law or regulations concerning the receipt, transportation, disposal or handling of Waste Material at the Landfill, whether or not such change causes enhancement in the Landfill, Santek shall promptly notify the Commission in writing and request that the Commission's increase its operating fee to reflect the increased construction cost and/or changes in the costs of its operations resulting from such physical problems or changes in law or regulation. If the Commission is in agreement with the amount of increase in operating fee requested by Santek, Santek shall be entitled to receive such increased operating fee. In the event that Santek and the Commission are unable to agree on the amount to be paid by the Commission to Santek by reason of any increase in construction or other similar cost to Santek or by reason of an increase in the operating cost, the parties shall attempt in good faith to resolve any dispute by negotiations. If the matter has not been resolved within forty-five (45) days of either party's request for negotiation, either party may initiate mediation under

129389.10 -18-

the Center for Public Resources ("CPR") Model Procedure for Mediation of Business Disputes in effect on the date of this Agreement. The mutual third party shall be selected from the CPR Panels of Neutrals, with the assistance of CPR, unless the parties otherwise agree. If the dispute has not been resolved by such nonbinding means as provided herein with ninety (90) days of the initiation of such procedure, either party may institute litigation on ten (10) days notice to the other party; provided, however, that if one party has requested the other to participate in mediation and the other has failed to participate, the requesting party may initiate litigation before the expiration of such period. Any applicable statute of limitations and defenses based upon the passage of time shall be tolled while the mediation procedures specified in this Section are pending. The parties shall take such action, if any, required to effectuate such Notwithstanding the foregoing, if the estimated increase in the cost of construction is twenty percent (20%) more than the original estimated cost of construction, which for the purposes hereof shall be \$126,000 per acre times the number of acres included in Phase 2 ("Original Estimated Cost"), the Commission shall not be obligated to pay to Santek any increase in its operating fee in excess of the amount of increase Santek is entitled to receive as a result of a twenty percent (20%) increase in such construction cost. other hand, if the estimated increase in the cost of construction is twenty percent (20%) more than the Original Estimated Cost, Santek shall not be obligated to complete the construction of

additional cells in Phase 2, but may terminate this Agreement upon filling the existing cells by thirty (30) days written notice to the Commission.

Within five (5) days following the end of each month, Santek shall submit a report to the Commission showing the usage of the Landfill including total tons of Waste Material during the previous month as well as the amount of industrial waste and sludges. The Commission shall remit to Santek the fees due to Santek by the later of the 10th of each month or five (5) business days after its receipt of such report.

If in the event that, during any 12-month period less than 43,134 tons of Waste Materials are received for placement in Phase 2 of the Landfill, the Commission agrees to pay to Santek the difference between the amount the Commission would have otherwise paid to Santek if 43,134 tons of Waste Materials had been received for placement in the Phase 2 of the Landfill, and the fee that Santek actually received for the tons of Waste Materials actually placed in Phase 2.

6. Post-Closure Care. During the term of this Agreement, Santek shall perform post-closure care of Phase 1 in accordance with the Phase 1 Closure-Post Closure Plan and of Phase 2 as cells are filled and closed in accordance with the post-closure plan submitted to and approved by TDEC. The Commission shall be responsible for providing the financial assurance in order to obtain a waiver of the post-closure surety bond or shall, at its own cost and expense, obtain a post-closure surety bond as required

by applicable law. After the termination of this Agreement, the Commission shall be solely responsible for all post-closure care.

7. Warranties and Representations by Santek. Santek represents and warrants to the Commission that Santek is fully qualified and capable, and has adequate financial resources, to fulfill and perform all of its obligations under this Agreement, and that it will fully comply with and observe all applicable governmental laws and regulations and meet or exceed all standards and requirements of the aforementioned "1984 MCI Original Plan" in existence upon the date of execution of this Agreement and as heretofore modified.

8. <u>Indemnification</u>.

(a) Santek agrees to indemnify and hold harmless the Commission, its officers, agents and employees from, against, and with respect to any loss, cost or damage suffered by it, or any claim or obligation asserted against it, by reason of or on account of any act or omission of Santek, officers, agents, employees, express invitees or invitees by implication or subcontractors, or on account or by reason of any condition of the Landfill created or aggravated by Santek or any of its officers, agents, employees or subcontractors, provided, however, notwithstanding anything to the contrary herein, Santek shall not have any liability or be responsible for or required to indemnify the Commission for any loss, cost or damage suffered by the Commission or any claim or obligation asserted against the Commission arising from (i) the operation of or condition of the Landfill prior to the date Santek

assumed responsibility for its operation, (ii) actions directly attributable to the Commission, its officers, agents and employees, (iii) the cessation of operations and/or closure of the Landfill by reason of actions which are not attributable to Santek, its officers, agents, employees and subcontractors or (iv) the slow and gradual release or escape of pollutants, including leachates and methane gas from the Landfill unless (A) in the case of the gradual release or escape of pollutants from Phase 1 and methane gas from Phase 2, it is established by competent evidence that such release or escape of pollutants have been caused by the acts or omissions of Santek, its officers, agents, employees or subcontractors which are negligent or constitute wilful misconduct or (B) in the case of the gradual release or escape of pollutants from Phase 2 other than methane gas, it is established by competent evidence that such release or escape of pollutants have been caused by the acts or omissions of Santek, its officers, agents, employees subcontractors.

(b) The Commission, agrees to indemnify and hold harmless Santek, its officers, agents, employees and subcontractors from, against and with respect to any loss, cost or damage suffered by Santek or any claim or obligation asserted against Santek, arising from (i) the operation, use or closure of the Landfill by any person or entity other than Santek, (ii) a condition existing at the Landfill prior to the date Santek began its operation of the Landfill or (iii) the slow and gradual release or escape of pollutants, including leachates and methane gas from the Landfill

- unless (A) in the case of the gradual release or escape of pollutants from Phase 1 and methane gas from Phase 2, it is established by competent evidence that such release or escape of pollutants have been caused by the acts or omissions of Santek, its officers, agents, employees or subcontractors which are negligent or constitute wilful misconduct or (B) in the case of the gradual release or escape of pollutants from Phase 2 other than methane gas, it is established by competent evidence that such release or escape of pollutants have been caused by the acts or omissions of Santek, its officers, agents, employees or subcontractors.
- 9. Delivery of Waste. During the term of this Agreement, Santek shall not have any responsibility for picking up and delivery Waste Materials to the Landfill. The Commission agrees to use its best efforts to cause the City of Lenoir City, County of Loudon and City of Loudon to deliver all residential Waste Material on its collection vehicles to the Landfill. Title to waste shall vest, as it is deposited, in the owner of the fee simple estate of the Landfill.
- upon its effective date and continue for the ten-year period from April 5, 1994 through March 31, 2004, unless earlier terminated as otherwise provided herein. This Agreement shall be automatically renewed for an additional one (1) year term following the end of the initial ten (10) year term or any extended one (1) year term unless notice is given by either party hereto that such party does not intend to extend this Agreement, which notice shall

be given no later than sixty (60) days prior to the end of the then existing term of this Agreement. Upon the final revocation of the Permit issued by TDEC for the operation of Landfill, this Agreement shall terminate. At the same time, upon the final denial of any Permit requested by Santek or the Commission in order to enlarge the Landfill, the term shall be for a period equal to the time necessary to fill and complete the permitted area of the Landfill. In the event that the payments by the Commission to Santek under the provisions of the last paragraph of Section 5 exceed \$500,000 in the aggregate and amount to not less than \$10,000 during the preceding 12-month period, then the Commission shall have the right to terminate this Agreement by sixty (60) days notice to Santek. On the other hand, in the event less than 54,600 tons of Waste Materials are disposed of in the Landfill in each of two consecutive years, Santek shall have the right to terminate this Agreement by sixty (60) days written notice to the Commission. the event of the termination of this Agreement for any reason prior to the end of its stated term, the Commission shall reimburse Santek for its unamortized construction costs which shall be determined by multiplying the number of lined acres in Phase 2 times \$126,000 per acre and then multiplying the product thereof by the percentage of unfilled capacity in the lined acres of Phase 2. If the Commission believes that this Agreement will be terminated by Santek pursuant to the provisions of this Section 10, the Commission shall have no duty or responsibility to develop the remaining acreage in the Landfill.

129389.10 - 24 -

- Agreement, Santek shall operate the Landfill in compliance with the Permit and all applicable laws, rules, regulations, specifications and approved operational plans of the State of Tennessee. This shall include but not be limited to Rule 1200-1-7.04 of TDEC and Subpart C of 40 CFR 258. Notwithstanding the foregoing, the Commission shall be responsible for compliance with respect to such portion of the operation of the Landfill for which it has an obligation under this Agreement.
- 12. <u>Letter of Credit</u>. Santek shall obtain irrevocable letter of credit to secure the faithful performance of its obligations to construct Phase 2 and its obligation to operate Phase 2. The irrevocable letter of credit shall be provided by a bank licensed by the FDIC and doing business in the State of Tennessee and shall be in an amount equal to \$125,000, with the cost or expense of such letter of credit to be paid by Santek. Such letter of credit shall provide for Commission to draw against the letter of credit such funds as are necessary to reimburse Commission for actual costs or expenses incurred by Commission as the result of a breach of this Agreement provided the Commission shall have incurred cost or expenses as a result of said breach; written notification of such breach shall be given to Santek by certified mail with a return receipt providing Santek with fifteen (15) days to cure said breach; Santek shall fail to cure such breach during the cure period; and an affidavit shall be executed by the Chair of the Commission specifying the breach by Santek, the

costs or expenses incurred by Commission, the fact that all requirements of the preceding have been complied with by Commission and that Commission is entitled to draw against the letter of credit. The Commission shall only be entitled to draw against the letter of credit those actual costs or expenses incurred by the Commission. Actual costs or expenses shall include any penalties paid by Commission directly attributable to acts of Santek, expenses paid to correct any breaches of this Agreement by Santek, expenses paid to correct any matters warranted by Santek and not paid during the warranty period, and rent on any equipment obtained by Commission which is necessary to operate the Landfill and the compensation paid to the operators of such equipment in the event Santek fails or refuses to operate the Landfill during the term of this Agreement (such rent shall be limited to a period reasonably necessary to purchase said equipment by Commission but in no event shall Commission be entitled to reimbursement for rent for more than sixty (60) days). Actual costs or expenses shall not include the cost of purchasing equipment to resume operations of the Landfill by Commission.

Insurance. Except for professional liability insurance which shall be procured and placed in effect within sixty (60) days after the effective date of this Agreement, Santek shall procure and maintain, at its own cost and expense, the following insurance coverages in the minimum amounts specified below during the term of this Agreement:

- (a) <u>Professional Liability Insurance</u>. Professional liability insurance for the engineering and design services provided hereunder in an amount not less than \$1,000,000 provided, however, if the cost of such insurance exceeds \$20,000 per year, the Commission agrees to negotiate in good faith with Santek an increase in fee set forth in Section 5 to cover such cost in excess of \$30,000.
- (b) <u>Worker's Compensation Insurance</u>. Contract worker's compensation insurance on all of its employees to be engaged in work under the provisions of this Agreement and for all of its subcontractors. Santek shall provide to the Commission certification of workers compensation insurance by each subcontractor before permitting each subcontractor to begin work on the Landfill.
- (c) <u>Comprehensive General Liability Insurance</u>. Comprehensive general liability, public liability and property damage insurance with pollution exclusion in an amount not less than \$1,000,000 per occurrence and \$1,000,000 in the aggregate.
- (d) <u>Automobile Insurance</u>. Comprehensive automobile liability insurance in an amount not less than \$1,000,000 for injuries, including death, to any one person and not less than \$1,000,000 on account of one accident and automobile property damage insurance in an amount not less than \$300,000.

Santek shall keep the required insurance in full force and effect at all times during the term of this Agreement and any renewals thereof, and Santek shall have the Commission named as an

additional insured of all policies to the extent covered losses are caused by the negligence or willful misconduct of Santek, its employees and servants. Santek shall also cause such policies to contain a provision providing that the coverage may not be cancelled without the insurer giving the Commission ten (10) days prior notice of cancellation. Santek shall effectuate such insurance coverage with insurance companies licensed to transact business in the State of Tennessee. Santek shall further furnish to the Commission a certificate of insurance or a copy of the insurance policies affording such coverage, in order to satisfy the Commission that it has obtained the required insurance coverage.

14. Standard of Performance. Notwithstanding the provisions of Section 12, if Santek fails to dispose of the Waste Material as herein provided for a period in excess of three (3) consecutive working days or fails to operate the site for a similar period, the Commission may, at its option, after sending written notice to Santek, as provided hereinafter, take over and operate the Landfill using any or all of Santek's equipment used in carrying out this Agreement, and the Commission may provide for such operation until such matter is resolved and Santek is again able to operate. Any and all operating expenses incurred by the Commission in so doing may be deducted by it from compensation payable to Santek hereunder. During such period, the liability of the Commission to Santek for loss or damage to such equipment so used shall be that of a bailee for hire, ordinary wear and tear is specifically exempt from such liability, and the liability of

Santek to third persons shall cease and all claims or demands arising out of the operation and/or control of the Landfill shall be directed solely to the Commission. Santek shall not be liable to the Commission, and the Commission shall indemnify and protect Santek against liability to third parties, on account of any act or omission of the Commission or its agents, employees, or subcontractors, occurring during any period in which the Commission is operating the Landfill under this Section 18 of this Agreement. If Santek is unable for any cause to resume performance at the end of thirty (30) working days, all liability of the Commission under this Agreement shall cease and the Commission shall be free to negotiate with other contractors regarding the operation of the Landfill. If Agreement with another contractor is reached, this shall not release Santek herein of its liability to the Commission of breach of this Agreement. Notwithstanding the foregoing, the Commission shall not be entitled to assume operation of the Landfill and Santek shall not have any liability to the Commission if such failure is due to war, insurrection, riot, Act of God, or any other cause or causes beyond the control of Santek and the Commission.

designated agent shall have the right to inspect the Landfill during normal construction and operating hours and at such other times as may be deemed necessary to protect the interests of the Commission. This right to inspect and audit the Landfill includes, but is not limited to the inspection of loads, scales, monitoring

records, records Santek is required to maintain, including injury and environmental incident reports and such other environmental or contractual compliance related records as the Commission deems necessary or as required by applicable regulatory authority. During groundwater or other monitoring, the Commission may have a representative present to inspect Santek's procedures and to receive split samples for independent testing, at Commission's expense. In addition to the foregoing, the Commission shall have the right, on prior written notice to Santek, to request Santek to conduct such procedures and acquire such samples from Permit monitoring points, including groundwater and gas monitoring wells, at such times and in such manner as it deems necessary, provided any such discretionary inspections (not required by Permit) shall not interfere with Landfill operations and shall be at the Commission's sole cost and expense. In order to insure that the Landfill meets or exceeds all contractual obligations, Commission shall have the right to review and approve (which approval shall not be unreasonably withheld) all proposed design, construction and operational plans, permit applications or other documents that are submitted to State or federal agencies, including requests for modifications, addenda or other additions. Santek shall provide all such information and supporting data requested for review.

16. <u>Santek's Personnel</u>.

- (a) Santek shall assign a qualified person or persons to be in charge of its operations at the disposal site and shall inform the Commission of said persons' identity.
- (b) Santek agrees to abide by all applicable Federal, State and local laws and regulations pertaining to employment, employee selection, compensation, and associated matters as relates to the operation of the project.
- (c) All Santek employees will receive special training in the overall operations of the Landfill as well as in their specialized assignments. This operational training, as well as landfill operational safety training, will be provided on a sustained and continuing basis.
- (d) There will be periodic safety meetings of all Santek employees for accident control. The facility will be equipped with fire extinguishers, including a fire extinguisher at the shop. These will be maintained on a regular basis to prevent accidental discharge.
- 17. Assignment. No assignment of this Agreement or any right occurring under it shall be made in whole or in part by Santek without the express written consent of the Commission. In the event of any assignment the assignee shall assume the liability of Santek, but such assumption shall not release Santek from primary liability for performance of this Agreement and any breach hereof.

- 18. Financial Statements. Santek shall cause an independent accounting firm to prepare as soon as practicable after the end of each calenday year during the term of this Agreement reviewed financial statements of Santek consisting of a balance sheet and footnotes, and upon receipt of such financial statements, Santek shall file a copy of them with the Commission.
- 19. <u>Bankruptcy</u>. This Contract shall terminate in the case of bankruptcy, voluntary or involuntary, or insolvency of Santek. In the case of bankruptcy, such termination shall take effect on the day and at the time the bankruptcy is filed.
- 20. <u>Number of Copies</u>. This Agreement may be executed in two (2) counterparts, all of which shall have the full force and effect of an original for all purposes.
- 21. <u>Law to Govern</u>. This Agreement shall be governed by the laws of the State of Tennessee, both as to interpretation and performance.
- 22. <u>Modification</u>. This Agreement constitutes the entire Agreement and understanding between the parties hereto, and it shall not be considered modified, altered, changed or amended in any respect unless in writing and signed by the parties hereto.
- 23. Right to Require Performance. The failure of the Commission at any time to require performance by Santek of any provisions hereof shall in no way affect the right of the Commission thereafter to enforce same. Nor shall waiver by the Commission of any breach of any provision hereof be taken or held

to be a waiver of any succeeding breach of such provisions or as a waiver of any provisions itself.

24. Point of Contact. All dealings, contacts, etc. between Santek and the Commission regarding Landfill matters shall be directed by Santek to the Chair of the Commission or such other person designated by the Commission. Commission shall provide to Santek at Santek's principal office in Bradley County, a copy of all letters, notices, and other written forms of communication received by Commission from the State of Tennessee or any other governing body which documents concern the disposal site and/or Santek. A copy of such documents shall be hand delivered or mailed to Santek with sufficient postage thereon as follows:

Kenneth D. Higgins, President Santek Environmental, Inc. 1306 South Lee Highway Cleveland, TN 37311

Santek shall also provide to the Chair of the Commission a copy of all such letters, notices, and other written forms of communication received by Santek which documents concern the disposal site. Both Santek and Commission agree to hand deliver or mail such copies to the other party pursuant to the terms of this section within three (3) days of receipt of such documents.

- 25. <u>Illegal Provisions</u>. If any provisions of this Agreement shall be declared illegal, void, or unenforceable, the other provisions shall not be affected and shall remain in full force and effect.
- 26. <u>Notice</u>. A letter addressed and sent by certified United States mail or hand delivered to either party at its 129389.10

business address shown hereinabove shall be sufficient notice whenever required for any purpose in this Agreement.

27. Effective Date. The effective date of this Agreement is $\frac{A\rho \, c \, l \, 5}{}$, 1994, and the date which Santek assumed operational control of the Landfill was July 15, 1988.

GOVERNING BODY:

Loudon County Solid Waste Disposal Commission

BY: Wayne Tolket

Title: Than ICSWDC

OPERATOR:

Santek Environmental, Inc.,

Kenneth D. Higgins

President