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OF
TEN YEAR MUNICIPAL SOLID WASTE REGIONAL PLAN

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PART I

EXECUTIVE SUMMARY
EXECUTIVE SUMMARY

The Houston County Solid Waste Planning Region is a one (1) county region.

Houston County has developed an attended convenience center.

Other Regional needs include a 25% reduction in the amount of solid waste disposed of a Class I landfills on a per capita basis, a recycling program, and an educational and public information program.

An annual collection event will be held in the county to collect household hazardous waste.

The Region’s goals and objectives are as follow:

GOALS

1. It is the goal of the Houston county solid waste planning region to make the county’s citizens, commercial businesses, industries, and institutions active, participating partners in the reduction, reuse, recycling, management, collection, and disposal of the county’s solid waste.

2. It is the goal of the Houston County Solid Waste Planning Region to reduce, reuse, and/or recycle as much of the county’s waste as practical.

3. It is the goal of the Houston County Solid Waste Planning Region to dispose of the remaining solid waste in an environmentally safe manner as inexpensively as possible, considering all factors.

4. It is the goal of the Houston County Solid Waste Planning Region to continue to provide adequate site and facility for its citizens to dispose of their non-recyclable solid waste.
OBJECTIVES

1. It is the objective of the Houston County Solid Waste Planning Region to present information concerning our goals to the citizens of the county.

2. It is the objective of the Houston County Solid Waste Planning Region to educate both adults and children to the importance of solid waste reduction, reuse, recycling, and the environmentally safe disposal of the remaining solid wastes.

3. It is the objective of the Houston County Solid Waste Planning Region to assist our industries, commercial business, and institutions to reduce, reuse and/or recycle their wastes as much as practical.

All new programs, services, and facilities will be coordinated with the existing system.

An implementation schedule is shown on Table 11-2, reproduced in this section.

The responsibilities of the existing solid waste system rests with the county executive and county commission and will continue to be so.

The regional plan includes the following chapters:

- Descriptions of the Municipal Solid Waste Region
- Analysis of the current Solid Waste Management System
- Growth trends and waste projections
- Waste reduction
- Recycling
- Composting, solid waste processing, waste-to-energy, and incineration capacity
- Disposal
- Public information and education
- Problem wastes
- Implementation
- Allocation of implementation responsibilities: plan adoption and submission
- Flow control and permit application review
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit ten (10) year plan</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appoint recycling/reduction/education</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>coordinator for county</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational program</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Collection of household hazardous wastes</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Commercial/institutional/industrial waste</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>reduction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish speaker’s bureau</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish recycling center</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Establish tire storage, used fluids, battery</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>storage site</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PART II

INTRODUCTION

The Houston County Solid Waste Planning Region was formed to determine how best to deal with the solid waste needs of the region for the next ten years. Part II of this plan examines all aspects of the regional waste situation.
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Chapter 1

Description of the Municipal Solid Waste Region

General

The Houston County Solid Waste Region consists of Houston County in north central Tennessee (see Figure 1-1). The county covers 200 square miles. The City of Erin is the county seat. The county is bisected by State Highway 149, running east/west and State Highway 13, which runs north/south. Houston County has a County Executive-County Commissioner type of government.

Figure 1-2 shows the region including the county boundary, major highways and major geographical features of the area.

Houston County is rolling to hilly. Farming and timber are the predominate land uses.
Regional Formation and Institutional Structure

In considering various regional options, the creation of the most efficient and practical region was essential. Houston County has a well established convenience center; therefore, they do have a collection system. The county’s solid waste production is much too little to efficiently develop and operate a landfill. There are no private landfills located close to Houston County; however, there are several located within a reasonable hauling distance. For these, and others, reasons it was decided a single county region would be the most simple and beneficial system to serve the needs of the county.

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City/State/Zip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. George E. Clark</td>
<td>Houston County Courthouse</td>
<td>Erin, Tennessee 37061</td>
</tr>
<tr>
<td>Mr. Gus Norfleet</td>
<td>Route 3</td>
<td>Erin, Tennessee 37061</td>
</tr>
<tr>
<td>Mr. Phil Averitt</td>
<td>Route 2, Box 605</td>
<td>Erin, Tennessee 37061</td>
</tr>
<tr>
<td>Mr. Fred Finley</td>
<td>Route 3, Box 42</td>
<td>Erin, Tennessee 37061</td>
</tr>
<tr>
<td>Mr. Robert Brown</td>
<td>P.O. Box 388</td>
<td>Erin, Tennessee 37061</td>
</tr>
<tr>
<td>Mr. Tommy Meadows</td>
<td>Route 3, Box 352</td>
<td>Erin, Tennessee 37061</td>
</tr>
<tr>
<td>Mr. Donnie Lewis</td>
<td>P.O. Box 529</td>
<td>Erin, Tennessee 37061</td>
</tr>
<tr>
<td>Mr. Darrell Kingsmill</td>
<td>P.O. Box 433</td>
<td>Erin, Tennessee 37061</td>
</tr>
<tr>
<td>Mr. J. C. Clark</td>
<td>Route 1, Box 253</td>
<td>Erin, Tennessee 37061</td>
</tr>
</tbody>
</table>

This committee is responsible for all planning and coordinating of the solid waste region and all proposals contained within this plan. The general public is kept advised of the Committee’s progress through the local media and by invitation to attend the regularly scheduled meetings.

Demographics

The Houston County Solid Waste Region has a population of 7,018 and a population density of 35.09 persons per square mile as determined by 1990 census projections. Tables 1-1 through 1-6 show the population distribution for the county as recorded in its Solid Waste Needs Assessment Plan as compiled by Greater Nashville Regional Council.

The population of the region is expected to remain fairly stable, increasing by fewer than 20 people over the next ten years. The effect of population on solid waste generation should, therefore, be minimal.
### Table 1-1
Population and Population Density in 1990

<table>
<thead>
<tr>
<th>Area (Sq. Miles)</th>
<th>Population</th>
<th>Avg. Density (Population/Sq. Mi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>7,018</td>
<td>35.09</td>
</tr>
</tbody>
</table>

*from Needs Assessment.

### Table 1-2
Regional Population by Urban and Rural Areas in 1990

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Population %</td>
<td>Population %</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>7,018</td>
</tr>
</tbody>
</table>

*from Needs Assessment, Table 1-3

### Table 1-3
Distribution of Population by Sex and Age in 1990

<table>
<thead>
<tr>
<th>Age</th>
<th>Total</th>
<th>Male</th>
<th>%</th>
<th>Female</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>390</td>
<td>175</td>
<td>44.872</td>
<td>215</td>
<td>55.128</td>
</tr>
<tr>
<td>5-17</td>
<td>1,271</td>
<td>658</td>
<td>51.770</td>
<td>613</td>
<td>48.230</td>
</tr>
<tr>
<td>18-44</td>
<td>2,501</td>
<td>1,239</td>
<td>49.540</td>
<td>1,262</td>
<td>50.460</td>
</tr>
<tr>
<td>45-64</td>
<td>1,578</td>
<td>777</td>
<td>49.240</td>
<td>801</td>
<td>50.760</td>
</tr>
<tr>
<td>65+</td>
<td>1,248</td>
<td>523</td>
<td>41.907</td>
<td>725</td>
<td>58.093</td>
</tr>
<tr>
<td>Total</td>
<td>6,988</td>
<td>3,372</td>
<td>48.254</td>
<td>3,616</td>
<td>51.746</td>
</tr>
</tbody>
</table>

*from Needs Assessment, Table 1-4

### Table 1-4
Distribution of Population by Education in 1990 (age 25 or Older)

<table>
<thead>
<tr>
<th>Education</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 9th Grade</td>
<td>1,255</td>
<td>39.35</td>
</tr>
<tr>
<td>High School (1-4)</td>
<td>1,636</td>
<td>51.30</td>
</tr>
<tr>
<td>College Degree</td>
<td>215</td>
<td>6.74</td>
</tr>
<tr>
<td>Post Graduate/Professional (&gt;4)</td>
<td>83</td>
<td>2.60</td>
</tr>
<tr>
<td>County Total</td>
<td>3,189</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*from Needs Assessment, Table 1-5
### Table 1-5
Distribution of Population by Type of Housing and Occupancy

<table>
<thead>
<tr>
<th></th>
<th>Total Persons</th>
<th>Occupied</th>
<th>Owner</th>
<th>Rented</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Single Family</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1, Detached</td>
<td>2,294</td>
<td>2,039</td>
<td>1,691</td>
<td>348</td>
</tr>
<tr>
<td>1, Attached</td>
<td>16</td>
<td>15</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td><strong>Multi-Family</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>35</td>
<td>26</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>3-4</td>
<td>68</td>
<td>59</td>
<td>4</td>
<td>55</td>
</tr>
<tr>
<td>5-9</td>
<td>14</td>
<td>13</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>10-19</td>
<td>46</td>
<td>44</td>
<td>1</td>
<td>43</td>
</tr>
<tr>
<td>20-49</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>50 or more</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Institutional</td>
<td>176</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mobile Home/Trailer</td>
<td>583</td>
<td>463</td>
<td>381</td>
<td>82</td>
</tr>
<tr>
<td>Other</td>
<td>29</td>
<td>24</td>
<td>19</td>
<td>5</td>
</tr>
<tr>
<td><strong>Regional Total</strong></td>
<td>3,261</td>
<td>2,683</td>
<td>2,112</td>
<td>567</td>
</tr>
</tbody>
</table>

*from Needs Assessment, Table 1-6,
Note: 2,683 total households in county, Needs Assessment, Chapter 1.

### Table 1-6
Regional Population Projections
1990 Census Population = 7,018

<table>
<thead>
<tr>
<th>Projected Year</th>
<th>Regional Total</th>
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<tbody>
<tr>
<td>1994</td>
<td>7,028</td>
</tr>
<tr>
<td>1995</td>
<td>7,031</td>
</tr>
<tr>
<td>1996</td>
<td>7,034</td>
</tr>
<tr>
<td>1997</td>
<td>7,036</td>
</tr>
<tr>
<td>1998</td>
<td>7,039</td>
</tr>
<tr>
<td>1999</td>
<td>7,041</td>
</tr>
<tr>
<td>2000</td>
<td>7,044</td>
</tr>
<tr>
<td>2001</td>
<td>7,037</td>
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*from Needs Assessment, Table 1-7
Houston County Solid Waste Planning Region
Ten Year Solid Waste Plan
November 1994

Economic Activity

Houston County has two industrial sites, one within the City of Erin and the other at the Stewart Houston Industrial Park, which is jointly owned with Stewart County. Further development of the tourism industry is a promising area, since Houston County is adjacent to both Kentucky Lake and Lake Barkley.

Tables 1-7 through 1-14 on this and following pages show the major economic characteristics of the region as recorded in the county Solid Waste Needs Assessment Plan as compiled by the development district.

Table 1-7
Basic Economic Information in 1990

<table>
<thead>
<tr>
<th>Population</th>
<th>MSA County (Y/N)</th>
<th>Total Employment</th>
<th>Total Earnings ($)</th>
<th>Per Capita Income ($)</th>
<th>% Population Below Poverty Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>7,018</td>
<td>N</td>
<td>2,672</td>
<td>23,012,000</td>
<td>8,612.65</td>
<td>18.7</td>
</tr>
</tbody>
</table>


Table 1-8
Employment as a Percent of Total Employment

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of Employed</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>851</td>
<td>31.85</td>
</tr>
<tr>
<td>Construction</td>
<td>223</td>
<td>8.35</td>
</tr>
<tr>
<td>Trade</td>
<td>428</td>
<td>16.02</td>
</tr>
<tr>
<td>Finance, Insurance, Real Estate</td>
<td>37</td>
<td>1.38</td>
</tr>
<tr>
<td>Services</td>
<td>633</td>
<td>23.69</td>
</tr>
<tr>
<td>Transportation, Communication, Public Utilities</td>
<td>295</td>
<td>11.04</td>
</tr>
<tr>
<td>Agricultural</td>
<td>86</td>
<td>3.22</td>
</tr>
<tr>
<td>Government</td>
<td>119</td>
<td>4.45</td>
</tr>
</tbody>
</table>

*From Needs Assessment, Table II-1.

Table 1-9
Non-Agricultural Employees
Number of Employees

<table>
<thead>
<tr>
<th>Industry</th>
<th>1-9</th>
<th>10-49</th>
<th>50-99</th>
<th>100-499</th>
<th>500+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mining</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Transportation</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>28</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Finance</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Services</td>
<td>21</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

*From Needs Assessment, Table II-2b
Quantities of solid waste generated are not available.
Table 1-10
Institutions Housing More Than 100 People

NO SUCH FACILITIES EXIST
(from: Needs Assessment, Table II-3.)

Table 1-11
Major Health Care Facilities

<table>
<thead>
<tr>
<th>No. of Facilities</th>
<th>No. of Beds</th>
<th>Infectious Management</th>
<th>Est. Quantity of Solid Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Onsite/offsite</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Type Treatment</td>
<td></td>
</tr>
<tr>
<td>1*</td>
<td>140</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Needs Assessment, Table II-4.)

*Note: This institution is a nursing home, not a hospital. Solid waste is disposed of by private collection service.

Table 1-12
Solid Waste Revenues Utilized by the Region

<table>
<thead>
<tr>
<th>Property Tax</th>
<th>Local Sales Tax</th>
<th>Wheel Tax</th>
<th>Local Solid Waste Collection Fee</th>
<th>User Fee/Tipping Fee</th>
<th>Other *</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$190,400.00</td>
</tr>
</tbody>
</table>

*from Needs Assessment, page II-6 - II-8

* General Fund Appropriations

Table 1-13
Fiscal Information

<table>
<thead>
<tr>
<th>Total Appraised Property Value</th>
<th>Total Property Tax Revenue</th>
<th>Total Sales Subject to Sales Tax</th>
<th>Total Local Sales Tax Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>$33,967,153</td>
<td>$934,000</td>
<td>$9,231,061</td>
<td>$497,000</td>
</tr>
</tbody>
</table>

*from Needs Assessment, Pages II-6 - II-8
Chapter 2

Analysis of the Current Solid Waste Management System for the Region

Waste Stream Characterization ........................................... 1
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Chapter 2

Analysis of the Current Solid Waste Management System for the Region

Waste Stream Characterization

The economic base and other area conditions can have significant effects on an area's waste generation. Houston County Solid Waste Planning Region possesses an economic base consisting mainly of farming, manufacturing, tourism and retail services. This diversified economy should sustain a relatively stable waste stream.

While these factors may affect the composition of waste stream as compared to national norms, the stream is not expected to deviate significantly in composition.

Waste Collection and Transportation Systems

In this section the existing solid waste collection and transportation systems of the region as a whole will be discussed.
Table 2-1
Quantity of Solid Waste Received for Disposal/Incineration
In Calendar 1991

<table>
<thead>
<tr>
<th>Tons Disposed (Tons/Year)</th>
<th>Population (1991)</th>
<th>Waste Disposed Per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Tons/capita/yr</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pounds/capita/yr</td>
</tr>
<tr>
<td>4,500</td>
<td>7,021</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,282</td>
</tr>
</tbody>
</table>

*From Needs Assessment, Page III-1

Table 2-2
Origin of Regional Solid Waste in 1994
(Tons per Year)

<table>
<thead>
<tr>
<th>Residential</th>
<th>Institutional/Commercial</th>
<th>Non-Hazardous Industries</th>
<th>Special</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,600</td>
<td>675</td>
<td>225</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*From Needs Assessment, Table III-1

Table 2-3
Acceptance of Categorical Solid Waste for Disposal/Incineration

<table>
<thead>
<tr>
<th>Yard Waste (Clippings, leaves, grass)</th>
<th>Sewer Sludge</th>
<th>Construction Demolition</th>
<th>Tires</th>
<th>White Goods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Y/N</td>
<td>QTY</td>
<td>Y/N</td>
<td>QTY</td>
</tr>
<tr>
<td>Y</td>
<td>5</td>
<td>N</td>
<td>0</td>
<td>20</td>
</tr>
</tbody>
</table>

*From Needs Assessment, Table III-2

Table 2-4
Description of Waste Stream by Materials

<table>
<thead>
<tr>
<th>Waste Category</th>
<th>National %</th>
<th>Calculated Regional Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper &amp; paperboards</td>
<td>40.0</td>
<td>1800</td>
</tr>
<tr>
<td>Glass</td>
<td>7.0</td>
<td>315</td>
</tr>
<tr>
<td>Ferrous Metals</td>
<td>8.5</td>
<td>293</td>
</tr>
<tr>
<td>Aluminum</td>
<td>1.4</td>
<td>63</td>
</tr>
<tr>
<td>Other Non-Ferrous Metals</td>
<td>0.6</td>
<td>27</td>
</tr>
<tr>
<td>Plastics</td>
<td>8.0</td>
<td>360</td>
</tr>
<tr>
<td>Rubber &amp; Leather</td>
<td>2.5</td>
<td>113</td>
</tr>
<tr>
<td>Textiles</td>
<td>2.1</td>
<td>95</td>
</tr>
<tr>
<td>Wood</td>
<td>3.6</td>
<td>162</td>
</tr>
<tr>
<td>Food Waste</td>
<td>7.4</td>
<td>333</td>
</tr>
<tr>
<td>Yard Waste</td>
<td>17.6</td>
<td>792</td>
</tr>
<tr>
<td>Misc. Inorganic Waste</td>
<td>1.5</td>
<td>68</td>
</tr>
<tr>
<td>Other</td>
<td>1.7</td>
<td>77</td>
</tr>
<tr>
<td>Total Municipal Solid Waste</td>
<td>100.0</td>
<td>4500</td>
</tr>
</tbody>
</table>

*From Needs Assessment, Table III-3
Table 2-5
Unmanaged Waste
(Tons Per Year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7688</td>
<td>4500</td>
<td>3188</td>
<td>42%</td>
</tr>
</tbody>
</table>

*from Needs Assessment, Table III-5

Source Reduction and Recycling Systems

The region’s source reduction and recycling systems generally consist of community and organizational recycling drives.

Solid waste is included as a small part of the science curriculum in schools and the Extension Service teaches some recycling and holds recycling contests. Houston County will take a more active role in recycling and they have appointed a committee to study how solid waste education may best be approached.

Houston County removes cardboard from the waste stream. It is baled and removed by a private company for recycling.

Waste Processing, Composting and Incineration Systems

Houston County owns and operates an air curtain incinerator that burns scrap wood and brush. It is further described in chapter 4.

Disposal Facilities

The region contains no landfills. The County’s solid waste is currently being hauled by contract to a private landfill in Obion County.

Costs of the Current System

The current system is operated on revenues from the Houston County Solid Waste/Sanitation Fund and from the cities of Erin and Tennessee Ridge.
Table 2-6

Solid Waste Expenditure Budget

Houston County 1994-1995

<table>
<thead>
<tr>
<th>Account No.</th>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>151-81100-602</td>
<td>Interest</td>
<td>9,000.00</td>
</tr>
<tr>
<td>151-81100-604</td>
<td>Interest</td>
<td>3,350.00</td>
</tr>
<tr>
<td>151-81100-602</td>
<td>Principal</td>
<td>9,000.00</td>
</tr>
<tr>
<td>151-81100-604</td>
<td>Interest</td>
<td>4,600.00</td>
</tr>
<tr>
<td>151-81100-602</td>
<td>Principal</td>
<td>6,500.00</td>
</tr>
<tr>
<td>151-81100-604</td>
<td>Interest</td>
<td>3,350.00</td>
</tr>
<tr>
<td>55720-359</td>
<td>Permit Fees</td>
<td>5,000.00</td>
</tr>
<tr>
<td>55732-101</td>
<td>Supervisor Payroll</td>
<td>17,015.55</td>
</tr>
<tr>
<td>55732-143</td>
<td>Equipment Operator Payroll</td>
<td>27,297.80</td>
</tr>
<tr>
<td>55732-189</td>
<td>Other Payroll</td>
<td>1,700.00</td>
</tr>
<tr>
<td>55732-307</td>
<td>Communication</td>
<td>350.00</td>
</tr>
<tr>
<td>55732-312</td>
<td>Contracts with Private Agencies</td>
<td>132,000.00</td>
</tr>
<tr>
<td>55732-330</td>
<td>Lease Payments</td>
<td>6,500.00</td>
</tr>
<tr>
<td>55732-336</td>
<td>Maintenance and Repair</td>
<td>15,000.00</td>
</tr>
<tr>
<td>55732-355</td>
<td>Travel</td>
<td>300.00</td>
</tr>
<tr>
<td>55732-425</td>
<td>Gasoline</td>
<td>5,000.00</td>
</tr>
<tr>
<td>55732-415</td>
<td>Electricity</td>
<td>1,300.00</td>
</tr>
<tr>
<td>55732-724</td>
<td>Site Development</td>
<td>8,120.55</td>
</tr>
<tr>
<td>58400-351</td>
<td>Rentals</td>
<td>1,500.00</td>
</tr>
<tr>
<td>58400-246</td>
<td>General Construction Materials</td>
<td>4,000.00</td>
</tr>
<tr>
<td>58600-201</td>
<td>Social Security</td>
<td>3,520.00</td>
</tr>
<tr>
<td>31100-510</td>
<td>Trustees Commission</td>
<td>3,000.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>267,403.90</strong></td>
</tr>
</tbody>
</table>
Revenues

The current system derives no revenues from collection fees; however, the City of Erin and the City of Tennessee Ridge will provide approximately $19,989.00 to aid in disposal.

Public Information and Education Programs

Solid waste is included as a small part of the science curriculum in schools and the Extension Service teaches some recycling and holds recycling contests. Houston County takes an active role in recycling and they have appointed a committee to study how solid waste education may best be approached. The Houston County school system does a lot to promote the environment and recycling.

Problem Waste

Problem waste within the region includes waste tires, waste oil, lead acid batteries and household hazardous waste. The Solid Waste Management Act of 1991 bans the disposal of these in landfills after January 1, 1995. The Houston County Solid Waste Region has no current method of disposal for these wastes except for landfilling. Chapter 10 of this plan discusses the proposed plan to deal with these wastes and the methods of encouraging public participation.

Strengths and Weaknesses of the Existing System

As a small rural county, Houston County has limited resources; however, due to the same fact, it has limited needs. The convenience center has been very successful since its start up. Roadside dumps have decreased substantially. The exportation of solid waste has been determined to be more cost effective than the construction and operation of a sanitary landfill.
Chapter 3

Growth Trends, Waste Projections and Preliminary System Structure

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  Table 3-2 Quantity of Solid Waste Requiring Disposal (adjusted for population) ......................... 2
  Table 3-3 Quantity of Solid Waste Requiring Disposal (adjusted for population and economic growth) .............. 2
  Table 3-4 Quantity of Solid Waste Requiring Disposal (adjusted for population, economic growth, waste reduction and recycling) .................................................. 3
Preliminary System Design ........................................... 4
Chapter 3

Growth Trends, Waste Projections and Preliminary System Structure

General

The goal of this section is to project the regional solid waste to be generated and compare the regional demand with the current and planned system supply to define the regional needs for the next decade.

Projected Regional Demand for Solid Waste Services

Tables 3-1 through 3-4 show the expected regional waste to be generated as adjusted for population, economic growth and various influencing factors. These figures will be used for determining regional needs for each projected year.

Table 3-1

Annual Per Capita Waste Generation in 1991

<table>
<thead>
<tr>
<th>Total Waste Disposal in FY 1993</th>
<th>Projected Population in 1993</th>
<th>Annual Per Capita Generation (Ton/Year/Person)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4500</td>
<td>7021</td>
<td>0.6409</td>
</tr>
</tbody>
</table>

*from Needs Assessment, page IV-2
### Table 3-2

**Quantity of Solid Waste Requiring Disposal (adjusted for population)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Waste Requiring Disposal by County (Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>4504</td>
</tr>
<tr>
<td>1995</td>
<td>4506</td>
</tr>
<tr>
<td>1996</td>
<td>4508</td>
</tr>
<tr>
<td>1997</td>
<td>4509</td>
</tr>
<tr>
<td>1998</td>
<td>4511</td>
</tr>
<tr>
<td>1999</td>
<td>4513</td>
</tr>
<tr>
<td>2000</td>
<td>4514</td>
</tr>
<tr>
<td>2001</td>
<td>4510</td>
</tr>
<tr>
<td>2002</td>
<td>4510</td>
</tr>
<tr>
<td>2003</td>
<td>4510</td>
</tr>
</tbody>
</table>

*Source: Needs Assessment, Table IV-1.*

### Table 3-3

**Quantity of Solid Waste Requiring Disposal (adjusted for population and economic growth)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Waste Requiring Disposal by County (Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>4657</td>
</tr>
<tr>
<td>1995</td>
<td>4664</td>
</tr>
<tr>
<td>1996</td>
<td>4671</td>
</tr>
<tr>
<td>1997</td>
<td>4678</td>
</tr>
<tr>
<td>1998</td>
<td>4685</td>
</tr>
<tr>
<td>1999</td>
<td>4692</td>
</tr>
<tr>
<td>2000</td>
<td>4699</td>
</tr>
<tr>
<td>2001</td>
<td>4701</td>
</tr>
<tr>
<td>2002</td>
<td>4706</td>
</tr>
<tr>
<td>2003</td>
<td>4711</td>
</tr>
</tbody>
</table>

*Table 3-2 with an estimated 3.2% annual economic growth, from Needs Assessment, Table IV-3*
Table 3-4

Quantity of Solid Waste Requiring Disposal
(adjusted for population, economic growth, waste reduction and recycling)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Waste Requiring Disposal by County (Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>4270</td>
</tr>
<tr>
<td>1995</td>
<td>3891</td>
</tr>
<tr>
<td>1996</td>
<td>3897</td>
</tr>
<tr>
<td>1997</td>
<td>3904</td>
</tr>
<tr>
<td>1998</td>
<td>3911</td>
</tr>
<tr>
<td>1999</td>
<td>3917</td>
</tr>
<tr>
<td>2000</td>
<td>3924</td>
</tr>
<tr>
<td>2001</td>
<td>3927</td>
</tr>
<tr>
<td>2002</td>
<td>3931</td>
</tr>
<tr>
<td>2003</td>
<td>3936</td>
</tr>
</tbody>
</table>

*from Table 3-3 with the 25% reduction goal from Table 4-4
Preliminary System Design

The primary objective of a solid waste system is to handle and dispose of its waste in a cost effective and environmentally sound manner. This includes such components as collection and transfer of the waste; the proper handling and disposal of such items as yard waste, recyclables, and household hazardous waste; and, ultimately, disposal.

The current system consists of one(1) convenience center and collection service available through a private firm for the entire county.

The current disposal site is a private landfill in Obion County. Waste is transported and disposed of in the landfill by a private contractor.

Houston County will provide a storage site for used tires and subsequent disposal following shredding.

Houston County will attempt, through education and public awareness, to reduce by a minimum of 25% the amount of solid waste to be disposed of.

The recycling of cardboard and metal products will continue. Other items will be added to the recycling effort.

Problem wastes will be addressed as described in a subsequent chapter.
# Chapter 4
Waste Reduction

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<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>1</td>
</tr>
<tr>
<td>Base Year Quantity</td>
<td>1</td>
</tr>
<tr>
<td>Table 4-1 Population and Quantities of Waste Disposed of at Municipal Solid Waste Disposal Facilities and Incinerators in 1989</td>
<td>1</td>
</tr>
<tr>
<td>Waste Reduction Goals and Objectives</td>
<td>2</td>
</tr>
<tr>
<td>General</td>
<td>2</td>
</tr>
<tr>
<td>Table 4-2 Waste Reduction Goals by Material Type for 1994 and 1995</td>
<td>2</td>
</tr>
<tr>
<td>Table 4-3 Waste Reduction Goals by Economic Sector for 1994 and 1995</td>
<td>2</td>
</tr>
<tr>
<td>Table 4-4 Waste Reduction Goals by Year - 1994 through 2003</td>
<td>3</td>
</tr>
<tr>
<td>Quantities</td>
<td>3</td>
</tr>
<tr>
<td>Table 4-5 Estimated Quantities of Waste Removed or Diverted</td>
<td>3</td>
</tr>
<tr>
<td>Recovery, Reuse and Recycle</td>
<td>4</td>
</tr>
<tr>
<td>Diverted to Alternate Disposal Methods</td>
<td>4</td>
</tr>
<tr>
<td>Economic Incentives</td>
<td>4</td>
</tr>
<tr>
<td>Regulatory Bans</td>
<td>4</td>
</tr>
<tr>
<td>Implementation Responsibility</td>
<td>4</td>
</tr>
<tr>
<td>Data Collection and Progress Reporting</td>
<td>4</td>
</tr>
</tbody>
</table>
Chapter 4
Waste Reduction

General

The goal as required by the State of Tennessee is to reduce the amount of solid waste on a per capita basis disposed of in municipal solid waste disposal facilities and incinerators by at least 25% by December 31, 1995. This chapter will establish the base year (1989) quantity, establish the waste reduction activities necessary to achieve at least 25% reduction and outline how these activities are to be carried out in this Region.

Base Year Quantity

The base year is 1989. Table 4-1 presents the population and waste disposed of the county and the regional totals.

<table>
<thead>
<tr>
<th>County</th>
<th>1989 Population</th>
<th>1989 Total Waste Disposed (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Houston</td>
<td>7250</td>
<td>3186</td>
</tr>
</tbody>
</table>

**"Managing Our Waste: Solid Waste Planning For Tennessee" by The University of Tennessee.**

The regional per capita waste disposal at municipal solid waste disposal facilities and incinerators in 1989 is calculated as follows:

\[
\text{Total Waste disposed of or incinerated} = \frac{\text{regional annual per capita waste disposal rate (tons/year)}}{\text{total regional population}}
\]

\[
\frac{3186 \text{ Tons}}{7250 \text{ Persons}} = 0.439 \text{ Ton/Person/Year}
\]

As required by the Regulations, 1989 must be used as the target year for calculating the waste reduction amount. Therefore, the Target 1995 per capita reduction may be calculated as follows:

\[
0.439 \text{ Ton/Person/Year} \times 0.25 = 0.110 \text{ Ton/Person/Year}
\]
Waste Reduction Goals and Objectives

General

The region's goal is to reduce the quantity of waste reaching municipal solid waste disposal facilities and incinerators 25% by December 31, 1995. The goals for 1994 and 1995 for various waste stream components are given in Table 4-2.

Table 4-2

<table>
<thead>
<tr>
<th>Material</th>
<th>1994 Reduction Goal (tons) 1</th>
<th>1995 Reduction Goal (tons) 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Paper</td>
<td>27</td>
<td>54</td>
</tr>
<tr>
<td>Yard Waste</td>
<td>150</td>
<td>299</td>
</tr>
<tr>
<td>Metals and Aluminum</td>
<td>60</td>
<td>120</td>
</tr>
<tr>
<td>Plastic</td>
<td>70</td>
<td>140</td>
</tr>
<tr>
<td>Demolition Waste</td>
<td>80</td>
<td>160</td>
</tr>
<tr>
<td>Total</td>
<td>387</td>
<td>773</td>
</tr>
</tbody>
</table>

1. 7,028 population x 0.055 ton/year/person = 387 tons
2. 7,031 population x 0.110 ton/year/person = 773 tons

The goals for 1994 and 1995 by economic sector are given in Table 4-3.

Table 4-3

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>309</td>
<td>617</td>
</tr>
<tr>
<td>Industrial/Commercial</td>
<td>58</td>
<td>116</td>
</tr>
<tr>
<td>Industrial</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>387</td>
<td>773</td>
</tr>
</tbody>
</table>
### Table 4-4
Waste Reduction Goals by Year - 1994 through 2003

<table>
<thead>
<tr>
<th>Year</th>
<th>Waste Reduction Goal (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>387</td>
</tr>
<tr>
<td>1995</td>
<td>773</td>
</tr>
<tr>
<td>1996</td>
<td>774</td>
</tr>
<tr>
<td>1997</td>
<td>774</td>
</tr>
<tr>
<td>1998</td>
<td>774</td>
</tr>
<tr>
<td>1999</td>
<td>775</td>
</tr>
<tr>
<td>2000</td>
<td>775</td>
</tr>
<tr>
<td>2001</td>
<td>774</td>
</tr>
<tr>
<td>2002</td>
<td>775</td>
</tr>
<tr>
<td>2003</td>
<td>775</td>
</tr>
</tbody>
</table>

1. Population from Table 1-6 times 0.110 ton per capita per year.

**Quantities**

Table 4-5 presents the estimated quantities of waste removed or diverted from the waste stream by year.

### Table 4-5
Estimated Quantities of Waste Removed or Diverted (tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>Previous Reductions</th>
<th>Recovered &amp; Recycled</th>
<th>Alternative Disposal</th>
<th>Economic Incentives</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985 to</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1989</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1990</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1991</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1992</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1993</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>27</td>
<td>150</td>
<td>50</td>
<td>548</td>
<td>775</td>
</tr>
</tbody>
</table>

1. Yard waste to be composted or burned.  2. From Table 4-4.  3. Residential Recycling.  4. Industrial/Commercial Recycling.
Recovery Reuse and Recycle
Chapter 6 presents the details of the region’s recovery, use and recycling plan.

Diverted to Alternate Disposal Methods
The volume of Class III/IV material generated in Houston County is too small to develop a Class III/IV landfill economically.

Economic Incentives

Currently there are no plans to implement specific economic incentives to reduce the quantity of solid waste being disposed of in the Region, but the Region reserves the right to implement incentives in the future. Using experience with other public sector fee based services, such as waste and sewer, as a basis, economic incentives may not be effective; when water and/or sewer rates go up, use decreases for a short while. After the public becomes accustomed to the new rates, the use climbs to pre increase levels.

Regulatory Bans

See Chapter 13, Flow Control and Permit Application Review

Implementation Responsibility

See Chapter 11, Implementation: Schedule, Staffing and Funding

Data Collection and Progress Reporting

The Region’s Solid Waste Planning Committee consisting of representatives from the various regional entities will prepare an annual report in accordance with T.C.A. §§ 68-31-863(b) and 68-31-871. This report will be submitted as required and will cover the calendar year just completed.

The submitted data will include the reduction amount for the categories listed in Table 4-5. This data will be used to prepare the report.
RULEMAKING HEARING RULES
OF
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF SOLID WASTE ASSISTANCE

CHAPTER 1200-1-7
WASTE DISPOSAL REDUCTION GOAL

AMENDMENTS

1. Rule 1200-1-7-.01(2) is amended by adding new definitions as follows:

"Compostable Material" means solid organic waste that may be decomposed under controlled conditions by micro-organisms under aerobic or anaerobic conditions which result in a stable humus-like material free of pathogenic organisms (e.g., food wastes, yard wastes, and low moisture content wastewater sludge).

"Market" means the transfer or sale of recovered materials to be used, reused, and recycled.

"Recycling" means any process by which materials which would otherwise become solid waste are collected, separated, or processed and reused or returned to use in the form of raw materials or products.

"Source Reduction" means any action or activity that reduces or eliminates the generation of a waste.

2. Rule Chapter 1200-1-7 is amended by adding a new Rule 1200-1-7-.09, WASTE DISPOSAL REDUCTION GOAL to read as follows:

RULE 1200-1-7-.09 WASTE DISPOSAL REDUCTION GOAL

(1) General Purpose
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 by December 31, 1995, as measured on a per capita basis within Tennessee by weight. The goal shall also apply to each municipal solid waste region; but does not apply to individual disposal facilities or incinerators. Individual disposal facilities or incinerators are used only as measurement locations for assessing the achievement of a region's waste reduction efforts.

(2) Waste Reduction Methods
The Department may consider a variety of options that a region shall take into account in meeting the twenty-five percent (25%) goal. As used in Rule 1200-1-7-.09, "municipal solid waste" (MSW) means any garbage, refuse, industrial lunchroom or office waste, household waste, household hazardous waste, yard waste and any
other material resulting from the operation of residential, municipal, commercial or institutional establishments and from community activities which are required to be disposed of in a Class I landfill, as defined in regulations adopted pursuant to Tennessee Code Annotated Title 68, Chapter 211; provided, that "municipal solid waste" does not include the following:

1. Radioactive waste;

2. Hazardous waste as defined in Tennessee Code Annotated Section 68-212-104;

3. Infectious wastes;

4. Materials that are being transported to a facility for reprocessing or reuse; provided further, that reprocessing or reuse does not include incineration or placement in a landfill; and

5. Industrial waste which may include office, domestic or cafeteria waste, managed in a privately owned solid waste disposal system or resource recovery facility, if such waste is generated solely by the owner of the solid waste disposal system or resource recovery facility.

Waste reduction methods or activities include, but are not limited to, the following:

(a) Any "municipal solid waste" diverted from a Class I disposal facility to a Class III or Class IV disposal facility as provided under Rules 1200-1-7-.01 through .04 adopted pursuant to the provisions of Tennessee Code Annotated Title 68, Chapter 211, Part 1.

(b) Composting of "municipal solid waste". The composting of municipal solid waste must have a market for such composted product in order to be considered as a method for waste reduction.

(c) Recycling. Recycling constitutes a method of waste reduction so long as the recovered materials are marketed for recycling, or are stored for recycling at a solid waste management facility and at least seventy-five percent (75%) of the stored material must be marketed within the succeeding twelve (12) months. The following processes shall not be considered as marketing of recyclable materials nor counted toward the 25% waste reduction goal:

1. Collection or material handling in preparation for buyers.

2. Storage of unprocessed or processed materials. Unprocessed municipal solid waste is not considered as being recyclable.
(d) Source reduction of "municipal solid waste". Source reduction measures as a method of waste reduction may include industrial process modification, feedstock substitutions or improvements in feedstock purity, various housekeeping and management practices, increases in the efficiency of machinery, and recycling within a process.

Source reduction may also include reduction in the amount and toxicity of waste generated by residential and commercial sectors, through such measures as product substitution, home composting and recycling.

Source reduction may also be achieved through the encouragement of consumer habits that include the selection of products that have reduced and recyclable packaging, and the re-use of durable goods.

(e) Problem waste diversion. The division of waste tires, used oil, lead-acid batteries, paints and other problem waste, as determined and identified by the Department, from a Class I disposal facility for recycling constitutes waste reduction. Problem wastes diverted from a Class I disposal facility and stored for recycling at a municipal solid waste management facility until marketed qualifies as waste reduction when diverted.

(f) Mulching of "municipal solid waste". Any non-treated wood waste that may be converted to a mulch must have a market in order to be considered as a method for waste reduction.

(3) Region's Waste Reduction Plan

(a) A region's waste reduction plan shall be consistent with the guidelines issued by the State Planning Office. Such a plan shall explain the region's waste reduction methods. The region may use any combination of methods; however, the following methods or practices will not be considered in the calculation for the region's waste reduction plan:

(1) Incineration,

(2) Unmarketed municipal solid waste compost,

(3) Recovered materials (other than problem wastes) stored for recycling without being marketed as prescribed by Rule 1200-1-7-.09(2)(c), and

(4) Illegal or unauthorized storage or disposal of municipal solid waste.

(b) The twenty-five percent (25%) goal applies to only the waste that has been going to Class I landfills or municipal solid waste incinerators. Measurements of waste are to be based on the amount of waste entering a disposal facility prior to combustion.
or landfiling. Materials recovered or collected at these facilities prior to combustion or landfiling shall be weighed and deducted from the total amount being disposed.

(c) The region shall present their calculation of the twenty-five percent (25%) waste reduction on a per capita basis. The per capita waste savings shall be presented in tons per person per year.

(d) The region’s plan shall utilize the base year of 1989 for measuring waste reduction unless a region can demonstrate that 1989 data (found in The University of Tennessee study (February 1991), "Managing Our Waste: Solid Waste Planning for Tennessee") is clearly in error. A region may receive credit toward the waste reduction goal for documented reductions from recycling and source reduction programs prior to 1989, but no earlier than 1985. The region shall notify in writing the Director of the State Planning Office of such an error and request approval of any adjustment to the 1989 data.

(e) Beginning on March 1, 1994, each region shall submit an annual report to the State Planning Office. Pursuant to T.C.A. Sections 68-211-863 and 68-211-871, such reports shall include, at a minimum, the amount and type of recycled materials collected in the region.

(4) Variance to Waste Reduction Goal

A region which fails to meet the goal, in spite of following an approved plan, may seek a variance from the Director of the State Planning Office. Any such request must comply with the provisions of T.C.A. Section 68-211-861(b). If approved, the variance may grant an extension of no more than five (5) years in attaining the goal.

If a region fails to achieve its goal and has not been granted a variance, it shall be subject to sanctions pursuant to T.C.A. Sections 68-211-816 and/or 68-211-117. These sanctions include a formal warning, loss of eligibility for grants from the Solid Waste Management Fund, and civil penalties.

If a multi-county region fails to meet the goal, sanctions shall apply only to the specific counties or cities within that region that have not carried out their waste reduction plan. Other cities and counties in the region will not be subject to the sanctions.
STATUTORY AUTHORITY

These amendments to Rules are promulgated pursuant to the Tennessee Solid Waste Management Act of 1991 as amended (Tennessee Code Annotated, Title 68, Chapter 211, Part 8) and the Uniform Administrative Procedures Act (Tennessee Code Annotated, Title 4, Chapter 5 et seq.).
Signature of the agency officer or officers directly responsible for proposing and/or drafting these rules:

Paul Evan Davis  
Paul Evan Davis  
Director  
Division of Solid Waste Assistance

The roll-call vote by the Tennessee Solid Waste Disposal Control Board on these rulemaking hearing rules was as follows:

<table>
<thead>
<tr>
<th>NAME OF BOARD MEMBER</th>
<th>Aye</th>
<th>No</th>
<th>Abstain</th>
<th>Absent</th>
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<tr>
<td>Ruth Neff</td>
<td>X</td>
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<td>Wilton Burnett, Jr.</td>
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<td>X</td>
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<td>J. P. Newman</td>
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<td>Robert D. Waddell</td>
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<td>William G. Stroud</td>
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<td>S. D. Wooten</td>
<td>X</td>
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<td>George R. Harvell, Jr.</td>
<td>X</td>
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<td>Wesley Beal</td>
<td>X</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Arthur Smith</td>
<td></td>
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</tr>
</tbody>
</table>

I certify that this is an accurate and complete copy of rulemaking hearing rules, lawfully promulgated and adopted by the Tennessee Solid Waste Disposal Control Board on the 3rd day of July, 1993.

Further, I certify that these rules are properly presented for filing, a notice of rulemaking hearing having been filed in the Department of State on the 29th day of September, 1992, and such notice of rulemaking hearing having been published in the October 15, 1992 issue of the Tennessee Administrative Register, and such rulemaking hearing having been conducted pursuant thereto on the 17th, 19th and 23rd, of November 1992.

Tom Tiesler, Technical Secretary  
Tennessee Solid Waste Disposal Control Board

Rafael B. Bustamante, Chairman  
Tennessee Solid Waste Disposal Control Board

Subscribed and sworn to before me this the 2nd day of January, 1993.

Manuel S. Thompson, Notary Public

My commission expires on the 27th day of January, 1996.
All rulemaking hearing rules provided for herein have been examined by the Attorney General and Reporter of the State of Tennessee and are approved as to legality pursuant to the provisions of the Administrative Procedures Act, Tennessee Code Annotated, Title 4, Chapter 5.

Charles W. Burson
Attorney General and Reporter

The rulemaking hearing rules set out herein were properly filed in the Department of State and will become effective on the 29th day of Sept., 1953.

Riley C. Farrand
Secretary of State

By: Richard Austin

PED/F2023021/D5/SWAP
Chapter 5
Waste Collection and Transportation
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  Figure 5-2 Municipal Solid Waste Collection Systems
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Chapter 5
Waste Collection and Transportation

Existing Regional Collection System

Neither Houston County nor either of the incorporated areas of Erin and Tennessee Ridge provide solid waste collection service. A private firm, Tennessee Disposal Company, does provide collection service in both Erin and Tennessee Ridge, and the remainder of the county to subscribing households and businesses. Approximately 600 households and 20 businesses utilize this available service. The remainder of the residents of Houston County are able to utilize the county owned convenience center.

The convenience center is located adjacent to the old County Landfill, which has been closed. Equipment located at the convenience center includes one (1) 42 cubic yard compactor, one (1) 40 cubic yard open top container, one (1) air curtain incinerator, and one (1) cardboard baler.

The solid waste collected at the convenience center is transported to an out of county landfill by ASCO Sanitation. Baled cardboard is removed and recycled by a private firm who owns the baler.
Regional Collection Needs

Using T.C.A. § 68-31-85 (b) as a basis, Table 5-1 presents the minimum number of convenience centers required in each area of the region.

Table 5-1
Convenience Centers Required Under T.C.A. § 68-31-85(b)

<table>
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<th>Total 1994 Population</th>
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<td>Total Area (Square Miles)</td>
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<td>Minimum Number Convenience Centers Required by Population</td>
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<tr>
<td>Minimum Number Convenience Centers Required by Area</td>
<td>1</td>
</tr>
<tr>
<td>Number Existing Convenience Centers</td>
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</table>

Implementation

Houston County has already placed in operation an attended convenience center.

Staffing and Training Needs

Most counties have found that the public desires that convenience center be open 55-60 hours per week. Convenience centers must be attended when they are open. The attendants can be either paid employees or volunteers.

It is recommended that a typical convenience center have a 42 cubic yard enclosed container with small capacity compactor, two (2) 42 cubic yard open top roll off containers for bulky items and one 42 cubic yard open top, open end roll off container for white goods. In addition, a prefabricated 8’x 10’ building with lights, heat and air conditioning and a chemical toilet should be provided for each center. A ramp should be provided for ease of loading the open top containers.

As mentioned previously, Houston County presently has an attended convenience center. This convenience center was placed in operation in 1992 and was well received by the residents of Houston County. Houston County will endeavor to continually make further improvements to the convenience center not only for solid waste reduction, but also for the convenience of its citizens.
Grants And Technical Assistance

A copy of the convenience center regulations are contained at the end of this chapter. The state offers matching grant funds to establish or upgrade convenience centers. The following is a copy of § 68-211-824 of the Laws.

§68-211-824. Matching grant assistance to establish or upgrade convenience centers. -From funds available in the solid waste management fund established by § 68-211-821, the department shall offer matching grant assistance to counties for the purpose of establishing or upgrading convenience centers required by § 68-211-851. Such grant funds may be applied to expenses for land, paving, fencing shelters for attendants, containers and basic equipment including, but not limited to, balers, crushers, grinders and fencing. Such funds may also be applied to expenditures for developing and printing of operating manuals, but such funds may not be used for regular operating expenses of a recurring nature. The local share of the match shall be determined by the department, using an economic index promulgated by the board based upon factors which include, but are not limited to, per capita income and property values of the county applicant. Counties falling within the lower one half (%) of the economic scale on the index shall be eligible for lower matching rates. The board shall promulgate regulations regarding the appropriate index and matching rates. (Acts 1991, ch. 451, § 21; T.C.A. § 68-31-824; Acts 1992, ch. 693, §24).

In addition, the State Law also provides (§ 68-211-85) that the University of Tennessee County Technical Assistance Service shall provide technical assistance if requested.

§ 68-211-851. Municipal solid waste collection and disposal systems - Convenience centers - Technical assistance. - (c) If requested, the University of Tennessee county technical assistance service and municipal technical advisory service shall provide technical assistance to a county or region for siting, designing, constructing, upgrading and developing and maintaining a system of convenience centers which meets the minimum design standards which the department will establish by regulations.

Summary

Houston County has already built and placed into operation an attended convenience center. Houston County will also seek any grants funds that might be available for reimbursement of the initial construction cost.
Convenience Center Regulations

HOUSTON COUNTY, TENNESSEE

GENERAL RULES:

- No out of county refuse accepted
- No construction refuse accepted
- No hazardous material accepted

OPEN TOP CONTAINER RULES:

- This container for couches, chairs, mattresses and other large items.
- No hazardous materials

CLOSED TOP (COMPACTOR) CONTAINER RULES:

- This container for household garbage and small items.
- No metals Allowed
- No hazardous materials

RECYCLING AREA RULES:

- All metals - refrigerators, dryers, stoves, washers, etc.
- No household garbage
- No hazardous materials
- No wood or tires
AMENDMENTS TO RULE 1200-1-7
CONVENIENCE CENTER RULE

Proposed Rules To Be Presented At the February 1993
Board Meeting

Rule 1200-1-7-.01(2) Definitions is amended by deleting the existing
definition and adding the following:

"Convenience center" means any area which is staffed and fenced
that has waste receptacles on site that are open to the public,
when an attendant is present, to receive household waste,
municipal solid waste and recyclable materials.

Rule 1200-1-7-.07(1)(b)5 is amended by deleting this part in its entirety and
substituting the following:

5. These fees shall not apply to any facility that recovers and/or
recycles seventy-five (75) percent of materials received. The
owner/operator must maintain records that support the seventy-five
percent rule. Records shall be maintained as per Rule 1200-1-7-.08(3).

Rule 1200-1-7-.07(1)(b) is amended by adding a new part 7. as follows:

7. These fees shall not apply to convenience centers as required by
T.C.A. 68-211-851.

Rule 1200-1-7-.02(1)(c)1. is amended by adding a new subpart (iv) as follows:

(iv) A convenience center, if

(I) The operator complies with the notification
requirements of Part 2 of this subparagraph.

(II) An operational manual describing the specific
manner in which the facility complies with Rule
10(3).

(III) A design plan on 1" = 20' scale indicating
boundaries of the site and all appurtenances.

(iv) A site location map on a USGS Topo map.

(v) The facility is designed and operated in
compliance with Rule 1200-1-7-10.
Rule 1200-1-7 is amended by adding a new rule to read as follows:

Rule 1200-1-7-.10 Convenience Centers -

(1) Purpose

(a) This rule shall establish the minimum level of service which every county must provide in order to assure that all residents of a county are provided with collection and disposal service.

(b) This rule shall establish minimum standards for the design and operation of convenience centers if such service is selected by a county.

(2) Minimum level of service -

(a) Household collection - A county shall be deemed to have met minimum level of service if at least ninety percent (90%) of all residents have access to household collection.

(b) Convenience centers - A county shall be deemed to have a minimum level of service if convenience centers are established as provided in this subparagraph. Each county must have at least one convenience center unless a higher level of service is provided.

(1) Number of centers - The minimum level of service shall be established as provided in (i) and (ii) as follows:

(i) Service area - The service area of a county is defined as follows:

(I) County area in square miles less in square miles the following:

(1) Federal lands or reservations;

(11) State lands or reservations;

(111) Foresty reserves as held by wood processing industry;

(IV) Municipal corporations served by mandatory collection;

(VI) Federally managed water bodies or rivers;
or:

(II) Population as certified by the most recent census as per the U.S. Bureau of Census less the population served by mandatory collection service.

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

(I) The service area in square mile divided by one hundred eighty square miles (180 \text{mi}^2); or

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

(All calculations shall be rounded to the nearest whole number.)

(c) Higher Level of Service - If a county or region proposes an alternative system, said system shall be approved by the Commissioner. The proposed system must provide a higher level of service than convenience centers. The county or region must, at a minimum, provide a review as per paragraph (4) of this rule and state in detail the criteria by which the system provides a higher level of service.

(3) Design and operation standards

(a) Access - The facility shall restrict unauthorized access by means of fencing with the ability to secure access points. Operating hours shall be posted at the facility.

(b) Dust and Mud Control - In order to prevent the creation of a nuisance or safety hazard all surfaces utilized for access and general operation shall be paved (includes compacted stone).

(c) Run-on and Run-off Control

1. In order to prevent operational hazards all run-on surface water shall be diverted around the facility.

2. In order to prevent ponding of water the surface of the facility shall be graded to assure proper runoff control. All runoff shall be diverted to an area that can be controlled with reference to release from the property. The release area shall be properly graded and stabilized to prevent erosion or other damage to adjoining properties. Silt fencing shall be utilized at this release point to control sediments and silt. The area shall be kept free of silt and debris.
(d) Fire safety - The facility must have on-site, properly maintained, fire suppression equipment. Arrangements must be made with the nearest available fire protection agency to provide additional protection.

(e) Communication - There shall be maintained on-site equipment capable of notifying the appropriate authorities of an emergency.

(f) Personnel facilities

1. In order to provide shelter during inclement weather and store necessary records and supplies a suitable structure shall be provided on-site.

2. Sanitary facilities shall be provided.

(g) Water - Service water should be provided to the facility if equipment and/or the facility management requires such water for maintenance.

(h) Process water - If mechanical compaction is utilized all liquid generated by this equipment shall be collected and properly managed.

(i) Waste Handling

1. Recycled material shall be placed in separate receiving containers;

2. All waste handling (including loading and unloading) shall be conducted on paved surfaces;

3. There is no storage of solid waste at the facility except in containers, bins, or on paved surface designed for such storage;

4. All loose litter shall be collected at the end of each working day.

(j) Facility supervision - Trained personnel must always be present during operating hours. Training will be established as per T.C.A. 68-211-853.

(h) Siting restrictions

1. The facility must not be located in a wetland.

2. The facility must not be located in a 100 yr. floodplain.
3. The facility must not cause or contribute to the taking of any endangered or threatened species of plants, fish or wildlife; or result in the destruction or adverse modification of a critical habitat.

(1) The facility shall not receive special waste unless approval is received from the Department in writing. Approval will require the construction of special containment areas.

(m) The facility shall not receive medical waste.

4. Municipal Solid Waste Collection and Plan

(a) Annually each solid waste disposal region shall revise the local plan as required by T.C.A. 68-211-814. This annual revision shall consider:

1. Survey of roadside dumps;
2. Citizen complaints;
3. Alternative systems available;
4. Volume of waste received or collected by the existing systems.

(b) This report shall be submitted to the State Planning Office on July 1, 1996 and each year thereafter.
STATUTORY AUTHORITY

THESE RULES ARE PROMULGATED PURSUANT TO TENNESSEE CODE ANNOTATED SECTIONS 68-211-102(a), 68-211-106(a)(1), 68-211-107(a), 68-211-111, and 68-211-851(a) and (b).
NOTICE OF RULEMAKING HEARING
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF SOLID WASTE ASSISTANCE

There will be a public hearing before the Tennessee Department of Environment and Conservation, Division of Solid Waste Assistance acting on behalf of the Tennessee Solid Waste Disposal Control Board, to consider the adoption and promulgation of rule amendments pursuant to Section 68-211-824 of Part 8, Solid Waste Management Act 1991 as amended. The hearing will be conducted in the manner prescribed by the Uniform Administrative Procedures Act, Tennessee Code Annotated, Section 4-5-204, and will take place at the location, date and time listed below:

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<tr>
<th>Location</th>
<th>Time</th>
<th>Date</th>
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<tr>
<td>Administrative Hearing Room</td>
<td>10:00 a.m.</td>
<td>June 16, 1993</td>
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<td>17th Floor, L &amp; C Tower</td>
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<tr>
<td>401 Church Street</td>
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<td>Nashville, Tennessee</td>
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SUBSTANCE OF PROPOSED RULE AMENDMENTS

Rule 1200-1-7-.10(1) **Purpose** is amended by adding a new subparagraph (c) as follows:

(c) This rule shall establish the economic index and local matching rates for grant assistance to counties to establish and upgrade convenience centers.

Rule 1200-1-7-.10 is amended by adding a new paragraph (5) as follows:

(5) **Economic Index**

Matching rates for convenience center grants shall be determined using the Ability to Pay Index (ATPI), developed by the Center for Business and Economic Research, University of Tennessee.

The local share required to match grant funds shall be as follows:

<table>
<thead>
<tr>
<th>ATPI Range</th>
<th>Local Match</th>
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<td>170.00-120.00</td>
<td>50%</td>
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<td>119.99-100.00</td>
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</tr>
<tr>
<td>99.99-90.00</td>
<td>30%</td>
</tr>
<tr>
<td>89.99-70.00</td>
<td>20%</td>
</tr>
<tr>
<td>69.99-Or below</td>
<td>10%</td>
</tr>
</tbody>
</table>

Authority: TCA Section 69-211-111(d) (2) and 68-211-854.
Office hours for the Division of Solid Waste Assistance are from 8:00 a.m. to 4:30 p.m., Monday through Friday (excluding holidays).

Oral or written comments are invited at the hearing. In addition, written comments may be submitted prior to or after the public hearing to:

Mr. Paul Evan Davis
or
Ms. Joyce N. Dunlap
Division of Solid Waste Assistance
14th Floor, L & C Tower
401 Church Street
Nashville, Tennessee 37243-0455
(615) 532-0091

However, such written comments must be received by the Division by 4:30 p.m. on June 30, 1993 in order to ensure consideration. For further information, contact either of the individuals aforementioned.

We certify that this is an accurate and complete representation of the intent and scope of rulemaking proposed by the Tennessee Department of Environment and Conservation and the Division of Solid Waste Assistance.

[signature]
Paul Evan Davis, Director
Division of Solid Waste Assistance

Subscribed to and sworn to before me this 28 day of
April , 1993.

[signature]
Notary Public.

My commission expires on the 27 day of November, 1993.

The notice of rulemaking set out herein was properly filed in the Department of State on the 29 day of April , 1993.

[signature]
Riley Darrell
Secretary of State

By: [signature]
Chapter 6

Recycling

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Regional Need
While recycling has received much attention as the politically correct action to take, its implementation can be seriously hampered, particularly in small areas, by the lack of viable markets. At the current time, Houston County provides a metals recycling program at its convenience center. The county also removes all cardboard from its waste stream. The cardboard is baled and recycled. Due to the requirement to reduce the waste stream, recycling will continue to be extensively utilized.

Program Expansion
The State of Tennessee has established the Office of Cooperative Marketing to help generate, stabilize, and locate markets for the recyclables collected in the state. Houston County should work closely with the Office of Cooperative Marketing to identify the most feasible methods to recycle solid waste.

Markets
Finding stable markets for collected recyclables is vital to the success of any recycling program. It is foolish to collect, separate, and store recyclables only to bury them. A recycling coordinator should be appointed. See Chapter 11, Staffing and Training Requirements. One of their duties will be to find markets for the collected recyclables. The State of Tennessee will also provide assistance. The following are sections from the Solid Waste Act of 1991.

§68-211-826. Office of Cooperative Marketing for Recyclables - Duties.

(a) From funds available from the Solid Waste Management Fund, by July 1, 1992, the Department of Economic and Community Development shall establish an Office of Cooperative Marketing for Recyclables.

(b) The duties of the Office of Cooperative Marketing for Recyclables include:
   (1) Preparing and maintaining a directory of regional buyers, which shall include current information on product specifications, markets and price ranges;
   (2) Preparing and maintaining a directory of public and private, for profit and nonprofit recycling program;
   (3) Collecting information on the quantity and quality of materials offered for sale by recycling programs;
   (4) Assisting counties in contract negotiation;
   (5) Creating a database for and operating an interactive information clearinghouse and marketing service, which shall include pricing information; and
   (6) Maintaining an inventory of available quantities, qualities and locations of recyclable materials in Tennessee, and marketing such sites to industries which can utilize available materials [Act 1991, ch. 451, §30; T.C.A. §68-31-826.]


From funds available in the Solid Waste Management Fund established by §68-211-821, the Commissioner of Economic and Community
Development shall appoint and convene a recycling market advisory council to assist the Department of Economic and Community Development in identifying markets and to advise the department on the expansion of markets for recyclables. Such council shall include representatives from the for-profit recycling business sector, nonprofit recycling sector, nonprofit or volunteer environmental organizations, and the manufacturing sector. [Act 1991, ch. 451, §30; T.C.A. §68-31-826.]
CHAPTER 7

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<td>Composting</td>
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<td>Waste Processing Facilities</td>
<td>1</td>
</tr>
</tbody>
</table>
Chapter 7

Composting, Solid Waste Processing
Waste-to-Energy and Incineration Capacity

General

The chapter will examine the viability of various alternative methods of waste disposal and determine their suitability for implementation with the region. The region currently manages its wastes efficiently, effectively, and in a manner consistent with applicable regulations. Composting, solid waste processing, waste to energy, and incineration were all examined in the compilation of this plan and none, with the possible exception of composting of yard wastes, were found to be economically feasible or necessary for the future needs of the region. The solid waste generated is not of sufficient quantity or composition to warrant the development of such systems within the region.

Waste-to-Energy/Incineration

The Houston County Municipal Solid Waste Region currently has no regionally owned or county owned or operated waste-to-energy or incineration facilities other than the air curtain incinerator located at the convenience center.

Composting

In an effort to better utilize its facilities and to aid in meeting the State mandated reduction goals, the public will also be encouraged to undertake composting on an individual basis. The region currently generates of an estimated 792 tons of such waste annually, see Table 2-4. These wastes will be diverted from the stream and composted at residences.

The region will prepare a flyer as part of its public outreach and education program outlining to the public the importance of composting and explaining how to compost at "home." This can be implemented at a minimal cost and scheduled along with the programs discussed in Chapter 9 of this plan.

Waste Processing Facilities

The Houston County Municipal Solid Waste Planning Region currently has no county owned and operated waste processing facilities.

Chapter 3 indicated the region has no quantitative need for any such facilities. There is no indication, under the current disposal plan, that future waste generation rates or current needs will change to support or new facilities. Therefore, due to the cost incurred from the establishing of such a facility and the lack of quantitative need, no such facility is planned in the future.
STATE REGULATIONS COMPOSTING
NOTICE
OF
RULEMAKING HEARING
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF SOLID WASTE MANAGEMENT

There will be a public hearing before the Tennessee Department of Environment and Conservation, Division of Solid Waste Management, acting on behalf of the Tennessee Solid Waste Disposal and Control Board, to consider the adoption and promulgation of Rules pursuant to Section 68-211-101 of Part I Solid Waste Disposal Act as amended. The hearing will be conducted in the manner prescribed by the Uniform Administrative Procedures Act, Tennessee Code Annotated, Section 4-5-204, and will take place at:

Nashville State Technical Institute
Clement Building - Auditorium [Room C-209]
120 White Bridge Road
Nashville, Tennessee

January 20, 1994  6:00 p.m.

Individuals with disabilities who wish to participate in these proceedings (or to review these filings) should contact the Tennessee Department of Environment and Conservation to discuss any auxiliary aids or services needed to facilitate such participation. Such contact may be in person, by writing, telephone, or other means, and should be made no less than ten days prior to (scheduled meeting date) (date such party intends to review such filings), to allow time to provide such aid or service. Contact the Tennessee Department of Environment and Conservation ADA Coordinator, 21st Floor, 401 Church Street, Nashville, TN 37248, (615) 532-0103.

Hearing impaired callers may use the Tennessee Relay Service (1-800-848-0298).

SUBSTANCE OF PROPOSED RULES AMENDMENTS

AMENDMENTS
1. Rule 1200-1-7-.01(2) Definitions shall be amended to include, in alphabetical order, the following:

"Backyard composting" means the composting of organic solid waste, such as grass clippings, leaves or food waste, generated by a homeowner or tenant of a single or multi-family residential unit or an apartment complex unit, where composting occurs at that dwelling unit.

"Compost" means solid waste which has undergone biological decomposition of organic matter, and has been disinfected using composting or similar technologies, and has been stabilized to a degree which is potentially beneficial to plant growth and which is used or sold for use as a soil amendment, artificial top soil, growing medium amendment or other similar uses.

"Composting" means the process by which biological decomposition of organic solid waste is carried out under controlled aerobic conditions, and which stabilizes the organic fraction into a material which can easily and safely be stored, handled and used in an environmentally acceptable manner. The presence of anaerobic zones within the composting material will not cause the process to be classified as other than composting. Simple exposure of solid waste under uncontrolled conditions resulting in natural decay is not composting except as specified in Rules 17-709.300 and 17-709.515, F.A.C.

"Composting facility" means a solid waste management facility where solid waste is processed using composting technology. Processing may include physical turning, windrowing, aeration of other mechanical handling of organic matter.

"Curing area" means an area where organic material that has undergone the rapid initial stage of composting is further stabilized into a humus-like material.

"Disinfection" means the selective destruction of pathogens indicated by a reduction in indicator organisms to less than or equal to 100 fecal coliform most probable number per gram of volatile suspended solid where the organic solid waste was maintained at or above (= 131°F) for three consecutive days in a mechanical composter or in an aerated, insulated static pile, or for 15 consecutive days in an aerated windrow with at least one turning or a non-aerated windrow with at least four turnings of the windrow.

"Foreign matter" means the inorganic and organic constituents in a solid waste stream that are not readily decomposed and that may be present in the compost. For purposes of this rule, foreign matter is metals, glass, plastics, rubber, bones, and leather, but does not include sand, grit, rocks or other similar materials.

"Land reclamation" means the restoration of productivity to lands made barren through processes such as erosion, mining or land clearing.

"Manure" means a solid waste composed of excreta of animals, and residual materials that have been used for bedding, sanitary or feeding purposes for such animals. For purposes of this rule, manure does not mean such material generated and managed by normal farming operations.
"Mesophilic stage" means a biological stage in the composting process characterized by active bacteria which favor a moderate temperature range of 20°C to 45°C. It occurs later in a composting process after the thermophilic stage and is associated with a moderate rate of decomposition.

"Normal farming operations" means the customary and generally accepted activities, practices and procedures that farmers adopt use or engage in during the production and preparation for market of poultry, livestock, and associated farm products; and in the production and harvesting of agricultural crops which include agronomic, horticultural, and silvicultural corps. Included is the management, collection, storage, composting, transportation and use of organic agricultural waste, manure, and wastes solely derived from agricultural crops.

"Stabilized" means that the compost has at least passed through the thermophilic stage, and that biological decomposition of the solid waste has occurred to a sufficient degree that will allow beneficial use.

"Thermophilic stage" means a biological stage in the composting process characterized by active bacteria which favor a high temperature range of 45°C to 75°C. It occurs early in a composting process before the mesophilic stage and is associated with a high rate of decomposition.

"Vector" means a carrier organism that is capable of transmitting a pathogen from one organism to another.

"Yard trash" means vegetative matter resulting from landscaping maintenance or land clearing operations and includes materials, such as tree and shrub trimmings, grass clippings, trees and tree stumps.
2. Rule 1200-1-7 is amended by adding new Rule 1200-1-7-.11 Composting so that as amended the new Rule shall read as follows:

Rule 1200-1-7-.11 Composting

(1) General

(a) Purpose - The purpose of this Rule is to establish procedures, documentation, and other requirements which must be met in order for a person to operate a composting facility or offer for sale compost in the Tennessee.

(b) Scope/Applicability

1. The requirements of this Rule apply as specified to operators of new and existing facilities in Tennessee. Except as specifically provided in this Rule, no new or existing facility may compost solid waste without a permit as provided in Rule 1220-1-7-.02(2) and Rule 1200-1-7-.03.

2. Compost produced outside the State of Tennessee which is used or sold for use within the state shall comply with standards.

3. Composting facilities that process domestic sludge under this Rule shall also comply with all other applicable federal or state laws regarding sludge management.

4. The following facilities or activities are not subject to the requirements to have a permit.

   (i) Backyard compost and the resulting compost

   (ii) Normal farming operations. For the purpose of this rule, composting of only yard trash or manure by persons on their own property for their own use on that property as part of agronomic or horticultural operations will be considered normal farming operations.

   (iii) The processing yard trash into other usable materials such as mulch is not considered composting and is not regulated by this rule.

5. A composting facility processing up to 3,000 cubic yards per year of only yard trash or manure may operate pursuant to Rule .02(1)(c) Permits by Rule.

(2) General Facility Standards - Unless specifically noted otherwise, the standards of this paragraph shall apply to all facilities.

(a) Performance Standards - The facility must be located, designed, constructed, and maintained, and closed in such a manner as to minimize to the extent practicable:
1. The propagation, harborage, or attraction of bids, flies, rodents, or other disease vectors;

2. The potential for releases of solid waste, solid waste constituents, or other potentially harmful material to the environment except in a manner authorized by State law;

3. The exposure of the public to potential health and safety hazardous thorough uncontrolled or unauthorized public access;

4. The presence of odors that are objectionable to the community.

(b) Control of Access and Use

1. The facility must have an artificial or natural barrier which completely surrounds the active portion of the facility and must have a means to control entry, at all times, through the gate or other entrances to the active portion of the facility.

2. If open to the public, the facility must have clearly visible and legible signs at the points of public access which indicate the hours of operation, the types of waste materials that either will or will not be accepted, emergency telephone numbers, schedules of charges (if applicable), and any other necessary information.

3. The facility must have paved access roads and parking areas. Traffic control signs shall be provided as necessary.

4. The facility must have trained personnel present and on duty during operating hours to assure compliance with operational requirements and to prevent entry of unauthorized wastes.

5. There must be no scavaging.

6. Scales for weighing of waste received must be provided.

(c) Leachate Collection

1. The facility shall have a leachate collection and removal system that is designed, constructed, and maintained such that all leachate from the waste receiving, storage, processing, and curing areas is collected. All washdown, stormwater or other water coming into contact with solid waste or compost must be collected.

2. Leachate shall be reused in the process or properly managed as per all applicable laws and rules.

(d) Waste management

1. The type and source of solid waste to be received shall be determined and categorized for review. This listing shall be updated as appropriate.
2. The type and source of any additives to be used in the production of compost shall be specified.

3. Waste inspection procedures shall be established to prevent the receipt of unauthorized or unacceptable waste. This will require the inspection of all loads received.

4. Contingency operations shall identify the disposal method of all waste in the event of equipment failure, facility disaster, or management of material contaminated by prohibited material such as oil, hazardous waste, etc.

5. All (other than facilities processing only yard waste) waste receiving areas, storage areas, and processing and curing areas shall be on paved surfaces (paved includes compacted stone mixtures) to minimize release of any contaminants to the groundwater. The paved areas shall be capable of withstanding wear and tear during normal operations.

6. Solid waste other than yard trash received at the facility shall be separated and stored in a manner to prevent vectors. Unusable material must be removed within 48 hours.

7. Recovered materials removed from the solid waste stream shall be stored in a manner that prevents vector problems and shall be removed at least every thirty (30) days.

(e) **Fire safety**

1. No open burning is allowed.

2. The facility must have, on-site and continuously available, properly maintained fire suppression equipment capable of controlling accidental fires. If available, local fire fighting service shall be acquired.

(f) **Litter control** - Fencing and/or other control shall be provided to confine loose waste to the area designated for storage or processing. Accidental dispersal from the designated areas shall be recovered daily.

(g) **Personnel facilities** - There must be provided:

1. A building or other shelter which is accessible to facility personnel which has adequate heating and light.

2. Potable water for washing and drinking.

3. Toilet facilities.

(h) **Communication** - The facility must have available during operating hours equipment capable of summoning emergency assistance as needed.
(i) **Operating equipment** - The facility must have on-site operational and monitoring equipment capable of maintaining the waste processing as designed.

(j) **Dust control** - The operator must take dust control measures as necessary to prevent a nuisance or safety hazard to adjacent landowners.

(k) **Run-on/Run-off Control**

1. The operator must design, construct, and maintain a run-on control system capable of preventing the 25 year, 24 hour storm from flowing onto all operational and storage areas.

2. The operator must design, construct, and maintain a run-off management system capable of minimizing impact to adjoining properties during the 25 year, 24 hour storm.

3. Run-off must be managed separately from leachate unless otherwise approved by the Commissioner.

(l) **Endangered Species** - Facilities shall be located, designed, constructed, operated, maintained, closed, and cared for during the post-closure care period in a manner that does not:

1. Cause or contribute to the taking of any endangered or threatened species of plants, fish, or wildlife; or

2. Result in the destruction or adverse modification of the critical habitat of endangered or threatened species.

(m) **Location in Floodplains** - Facilities must not be located in a 100-year floodplain.

(n) **Wetlands** - The facility must not be located in a wetland.

(o) **Odor control** - Odor control provisions must be instituted such that a public nuisance is not created.

(3) **Buffer Zone Standards for Siting New Facilities** - All waste management, areas shall be located so as to conform at a minimum to the following standards:

(a) 100 feet from all property lines.

(b) 500 feet from all residences, unless the owner of the residential property agrees in writing to a shorter distance.

(c) 200 feet from the normal boundaries of springs, streams, and lakes.
(4) **Classification of Compost** - Compost shall be classified based on type of waste processed, amount of foreign material, particle size and organic matter content of the product, and the concentration of heavy metal.

(a) **Classification Criteria**

1. Type of waste processed
   
   (i) Yard trash only
   
   (ii) Manure or yard trash and manure
   
   (iii) Solid waste

2. Product maturity
   
   (i) Mature compost is a highly stabilized compost material that has been exposed to prolonged periods of decomposition. It will not reheat upon standing to greater than 20°C above ambient temperature. It has beneficial use and can be used in direct contact with roots. The material should be brown to black in color. This level of maturity is indicated by a reduction of organic matter of greater than 60%.

   (ii) Semi-mature compost is compost material that is at the mesophilic stage. It will reheat upon standing to greater than 20°C above ambient temperature. It has beneficial use, although direct contact with roots should be avoided. The material should be light to dark brown in color. This level of maturity is indicated by a reduction of organic matter of greater than 40% but less than or equal to 60%.

   (iii) Fresh compost is compost material that has been through the thermophilic stage and has undergone partial decomposition. The material will reheat upon standing to greater than 20°C above ambient temperature. It has beneficial use, but proper care is needed as further decomposition and stabilization will occur. The material should be similar in texture and color to the feed stock into the composting process. This level of maturity is indicated by a reduction of organic matter of greater than 20% but less than or equal to 40%.

3. Particle size based on percent passing
   
   (i) Fine: 10 mm, organic 25 percent
   
   (ii) Medium: 15 mm, organic 30 percent
   
   (iii) Coarse: 25 mm, organic 35%

4. Concentration codes - Expressed in mg/kg dry weight. If any one parameters falls in a higher concentration group, the code for the higher group will apply.
## CONCENTRATION CODES

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<th>PARAMETER</th>
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<th>2</th>
<th>3</th>
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<td>15-&lt;30</td>
<td>30-100</td>
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<tr>
<td>Copper</td>
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<td>450-&lt;900</td>
<td>900-3,000</td>
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<td>Lead</td>
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<td>Nickel</td>
<td>&lt;50</td>
<td>50-&lt;100</td>
<td>100-500</td>
</tr>
<tr>
<td>Zinc</td>
<td>&lt;900</td>
<td>900-&lt;1,800</td>
<td>1,800-10,000</td>
</tr>
</tbody>
</table>

(b) Compost shall be classified as follows:

1. Type Y is compost made only from yard trash, which is mature or semi-mature, and is fine, medium or coarse. For such composition, a foreign matter content of less than 2% and a metal concentration equivalent to code 1 is assumed.

2. Type YM is compost made from only manure or yard trash with manure which is mature or semi-mature and is fine, medium, or coarse. For such compost, a foreign matter content of less than 2% and a metal concentration equivalent to code 1 is assumed.

3. Type A is compost made from solid waste, other than yard trash and manure, which is mature and fine. The foreign matter content shall be less than or equal to 2%, and the metal concentration shall fall under code 1. Further, it shall contain no foreign matter, such as glass or metal shards, of a size and shape that can cause injury.

4. Type B is compost made from solid waste, other than only yard trash or manure, which is mature or semi-mature and is fine or medium. The foreign matter content shall be less than or equal to 4%, and the metal concentration shall fall under codes 1 or 2. Further, it shall contain no foreign matter, such as glass or metal shards, of a size and shape that can cause injury.

5. Type C is compost made from solid waste, other than only yard trash or manure, which is mature or semi-mature and is fine, medium or coarse. The foreign matter content shall be less than or equal to 10%, and the metal concentration shall fall under codes 1, 2 or 3.

6. Type D is compost made from solid waste, or from yard trash or manure, which is fresh and is fine, medium or coarse. It shall have a foreign matter content of less than or equal to 10%, and the metal concentration shall fall under codes 1, 2 or 3. Foreign matter content and metal concentration is assumed for fresh compost made from only yard trash or manure.
(c) Criteria for use of Compost

1. Compost classified as Types Y, YM or A shall have unrestricted distribution.

2. Compost classified as Types B or C shall be restricted to use by commercial, agricultural, institutional or governmental operations. However, if it is used where contact with the general public is likely, such as in a park, only Type B may be used.

3. Compost classified as Type D shall only be used at landfills or land reclamation projects. However, such use shall not be allowed if contact with the general public is likely.

4. No compost shall be used in any manner that will endanger the public health or the environment.

(d) Testing

1. Compost shall be sampled and analyzed as follows:

   (i) A composite sample of the compost produced at each composting facility shall be analyzed at intervals of every 20,000 tons of compost produced or every three months, whichever comes first, for:

<table>
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<tr>
<th>Parameter</th>
<th>Unit</th>
<th>Method</th>
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<tbody>
<tr>
<td>Moisture</td>
<td>%</td>
<td>EPA 160.3</td>
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<tr>
<td>Total Nitrogen</td>
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<td>EPA 351 and 353</td>
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<td>Total Phosphorus</td>
<td>% by dry weight</td>
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<tr>
<td>Total Potassium</td>
<td>% by dry weight</td>
<td>EPA 3050/7610</td>
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<tr>
<td>Reduction in Organic Matter</td>
<td>%</td>
<td>EPA 160.4</td>
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<tr>
<td>Organic Matter</td>
<td>%</td>
<td>EPA 160.4</td>
</tr>
<tr>
<td>pH</td>
<td>Standard Units</td>
<td>EPA 9045</td>
</tr>
</tbody>
</table>

   (ii) In addition to (i) of this part all compost shall also be made from solid waste, other than only yard trash or manure shall be analyzed at intervals of every 20,000 tons of compost produced or every three months, whichever comes first, for:
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Matter</td>
<td>%</td>
<td>see 40 below</td>
</tr>
<tr>
<td>Cadmium</td>
<td>mg/kg dry weight</td>
<td>EPA 3050/7130</td>
</tr>
<tr>
<td>Copper</td>
<td>mg/kg dry weight</td>
<td>EPA 3050/7210</td>
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<tr>
<td>Lead</td>
<td>mg/kg dry weight</td>
<td>EPA 3050/7420</td>
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<td>Nickel</td>
<td>mg/kg dry weight</td>
<td>EPA 3050/7520</td>
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<td>Zinc</td>
<td>mg/kg dry weight</td>
<td>EPA 3050/7950</td>
</tr>
<tr>
<td>Fecal Coliform</td>
<td>most probable number (MPN)SM 908 per gram of volatile suspended solids (VSS)</td>
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</tr>
</tbody>
</table>

2. The Department may decrease or increase the parameters to be analyzed for or the frequency of analysis based on monitoring data changes in the waste stream or processing, or the potential presence of toxic substances. Sample collection, preservation, and analysis shall assure valid and representative results pursuant to Department-approved quality assurance plan.

3. Composite samples shall consist of at least three individual samples of equal volume taken from separate areas along the side of the pile of the compost produced. Each sampling point shall be at a depth of two feet into the pile from the outside surface of the pile.

4. Foreign matter content shall be determined by passing a dried, weighed sample of the compost product through a one-quarter inch or six millimeter screen. EPA Method 160.3 shall be used to dry the sample. The material remaining on the screen shall be visually inspected, and the foreign matter that can be clearly identified shall be separated and weighed. The weight of the separated foreign matter divided by the weight of the total sample multiplied by 100 shall be the % dry weight of the foreign matter content.

5. The organic matter reduction is determined by measuring the volatile solids content using EPA method 160.4.

(e) Reporting - Facility owner or operators shall record and maintain for three years the following information regarding their activities for each month of operation of the facility. Records shall be available for inspection by Department personnel during normal business hours and shall be sent to the Department upon request:

1. Analytical results on composting testing;
2. The quantity, type, and source of waste received;
3. The quantity and type of waste processed into compost;

4. The quantity and type of compost produced by product classification; and

5. The quantity and type of compost removed for use or disposal, by product classification, and the market or permitted disposal facility.

(f) Annual Report

Owners and operators of facilities producing compost made from solid waste shall submit to the Department an annual report by March 1. The report and shall include; at

1. The facility name, address and permit number;

2. The report year.

3. The total quantity in tons, with sludge values expressed in dry weight, and type of waste received at the facility during the year covered by the report;

4. The quantity in tons, with sludge values expressed in dry weight, and type of waste processed into compost at the facility during the year covered by the report;

5. The total quantity in tons and type of compost produced at the facility, by product classification, during the year covered by the report; and

6. The total quantity in tons and type of compost removed for use or disposal from the facility, by product classification, along with a general description of the market if for use during the year covered by the report.

(5) Design and Construction Plans

(a) Master Plan - drawn at a scale of not less than 1" = 40' or not less than 20 foot contour interval which clearly depicts:

1. The boundary of the proposed facility;

2. The existing drainage pattern of all site runoff;

3. Runoff monitoring stations;

4. Primary access roads;

5. Wells within one quarter mile of the site boundary;

6. The location of all 100-year floodplain boundaries;
7. All residences within one quarter mile of the site boundary (if in an urban area residential properties may be defined).

(b) **Design Plans** - drawn at a suitable scale of not less than one inch equals 50 feet and with a contour interval of not greater than five feet, which clearly depicts:

1. All structures;
2. Proposed waste processing areas;
3. Proposed waste storage areas;
4. All drainage appurtenances that control runon/runoff and the direction of flow;
5. The location of all existing and proposed utilities and roads (defining surface material);
6. The location of all leachate collection/treatment structures, piping, storage appurtenances, and any other associated units;

(c) **Narrative Description of the Facility and Operation** - defining all procedures and activities pertinent to the design and operation of the facility. This narrative shall include, but not necessarily be limited to:

1. The compliance of all standards defined in paragraphs (2) and (4) of this Rule;
2. Describes the waste handling and processing equipment to be used;
3. Describes the management of runon/runoff with design calculations of all appurtenances;
4. Describes the management of the leachate system and the disposition of the leachate;
5. Describes odor control measures;
6. Establishes the final closure of the facility.

**NOTE:** Page 14 is not attached because it only contains the notarized statement of rulemaking intent and its proper filing in the Secretary of State's Office.

ELC/F2023342/SWM
Chapter 8

Disposal Capacity

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Supply and Demand ........................................ 1
Chapter 8

Disposal Capacity

Supply and Demand

Houston County does not have a solid waste disposal facility. All solid waste is exported and will continue to be done so. The tables presented in Chapter 2 establish the projected solid waste amounts. These will continue to be exported under the existing arrangement.

The quantities of solid waste generated in Houston County will not justify the expense of constructing and operating a landfill.
Chapter 9
Public Information and Education

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Chapter 9

Public Information and Education

Regional Needs

As shown in Chapters 2 and 3, the population of the Region is expected to increase only slightly over the next 10 years. The citizens in the Region are becoming more environmentally aware, demanding the safe handling of their wastes. They are also revolted against higher taxes and fees. Thus, the municipal leaders are faced with a paradoxical situation. They wish to meet the public’s request for upgraded environmental sound collection and disposal methods but the same public is demanding no tax increases.

The Region’s citizens and businesses have shown a willingness to comply with reasonable requests if they understand (and agree) with the purposes and objectives. Thus there is a need for an effective and truthful public education and information program. The Region needs public support for the plan and its objectives for several reasons, such as:

- The goal of reducing solid waste production by 25% cannot be met without public, commercial, industrial, and institutional support.
- The disposal cost per ton of solid waste will increase due to increased regulatory requirements.
- Overwhelming voluntary participation and cooperation is vital, we cannot station "trash police" on every corner.
- Our tax dollars are needed elsewhere.
- Reducing solid waste production, recycling, protecting our environment, and saving tax money is the right thing to do.

We have recently witnessed the emergence of public consciousness of environmental issues. In our collective conscious there is much less cognizance of the many effects that our day to day behavior has on the quality of the air we breathe, the water we drink, and most important, the ways in which we produce, consume, and dispose of the materials of daily living. The connection between the products we use and the environment we share does not come naturally to American consumers. We grew up as a “consuming” society. We must translate environmentally sound goals into actual behaviors. Voluntary social action is more desirable than mandatory governmental regulation, it costs less and has a longer lasting effect.
Public Information and Education Steps

1. Regional Goals and Objectives

   a. Goals

   1. It is the goal of the Houston County Municipal Solid Waste Planning Region to make the Region’s citizens, commercial businesses, industries, and institutions active, participating partners in the reduction, reuse, recycling, management, collection, and disposal of the Region’s solid waste.

   2. It is the goal of the Houston County Municipal Solid Waste Planning Region to reduce, reuse and/or recycle as much of the Region’s waste as practical.

   3. It is the goal of the Houston County Municipal Solid Waste Planning Region to dispose of the remaining solid waste in an environmentally safe manner as inexpensively as possible, considering all factors.

   4. It is the goal of the Houston County Municipal Solid Waste Planning Region to continue to provide a clean, well maintained, attended convenience center to its residents.

   b. Objectives

   1. It is the objective of the Houston County Municipal Solid Waste Planning Region to present information concerning our goals to the citizens of the Region.

   2. It is the objective of the Houston County Municipal Solid Waste Planning Region to educate both adults and children to the importance of solid waste reduction, reuse, recycling, and the environmental safe disposal of the remaining solid waste.

   3. It is the objective of the Houston County Municipal Solid Waste Region to assist our industries, commercial business, and institutions to reduce, reuse, and/or recycle their wastes as much as practical.

   4. It is the objective of the Houston County Municipal Solid Waste Region to inform the tax payers in the Region of the costs of solid waste collection, transportation, and disposal.
2. Target Groups and Audiences

The Region's target groups and audiences will be:

a. All schools in the Region. At the end of this chapter is a list of the schools in the county.

b. Boy Scout Groups
g. Lions Club

b. Girl Scout Groups
h. Special interest groups

d. Newspapers
i. 4-H

e. Civitan
j. Churches

f. Community Clubs
k. PTO

3. Amount and Kind of Information To Be Provided

Information to the target groups will be a combination of written, electronic, and verbal material. Written handouts will either be developed or commercially available handouts are in the back of this chapter.

One company that provides such materials is:

Educational Development Specialists
Think Earth Environmental Education Program
5505 East Carson Street, Suite 250
Lakewood, CA 90713-3093
(310) 420-6814

An organization that offers educational material is:

Keep America Beautiful, Inc.
9 West Broad Street
Stamford, CT 06902
(203) 323-8987

An organization that can offer direction and advise on educational program is:

Clean Tennessee Program
Edith Beaty Heller, State Coordinator
Suite 113, Building One
Memphis State University
Memphis, TN 38152
(901) 678-4101

9-3
Some material supplied by Keep America Beautiful and the Clean Tennessee Program are included at the end of this chapter.

There is now a commercially available (currently at no cost) interactive, Macintosh computer software, including a slide show workbook materials, a teacher’s guide, and supplementary materials available for grades 6-8 about integrated solid waste management. It is available from Integrated Waste Services Association and is funded by the U.S. Department of Energy. Sample materials are at the end of this chapter.

The contact person is:

Integrated Waste Services Association
Margaret Ann Charles, Director
State Programs and Policy
Two Lafayette Center
1133 21st Street NW, Suite 205
Washington, DC  20036
(202) 467-6240

In addition, a speakers list will be developed by the Region. These speakers will make themselves available at no cost to speak regarding solid waste matters on a suitability and availability basis. The Division of solid Waste Management has set up a speaker’s bureau to help educate and advise the regional solid waste planning boards. They offer programs on:

Unit 1: Solid Waste Collection and Transportation Systems.


Unit 3: Land Disposal - The 21st Century Landfill.

Unit 4: Public Outreach, Involvement and Participation.

4. Methods to Be Utilized

a. School Based Instruction

School based instruction will include presentations from members of the speakers bureau. In addition, each principal will be made aware of the free computer interactive material offered by the Integrated Waste Services Association and encouraged to use it. Educational Development specialists offers materials targeted to specific grades, this information will also be made available to the principals. The schools will also be encouraged to schedule field trips to the convenience centers, recycling facilities, and area landfills.
b. Workshop, Conferences, and Training Courses

Workshops, conferences, and training courses are scheduled only short periods ahead of time. Thus it is impossible for this plan to contain a list of future courses that may become available. The National Recycling Coalition held its 12th Annual Congress and Exposition in Nashville on October 11-14, 1993. It is hoped that this event will continue in the future.

The coalition’s address is:

National Recycling Coalition
1101 30th Street NW
Suite 305
Washington, DC 20007

Perhaps the best way to stay current in solid waste issues is to subscribe to national trade publications such as Waste Age Magazine and to join professional societies such as Solid Waste Association of North America (SWANA).

Waste Age Magazine
P.O. Box 420183
Palm Coast, FL 32142-9964

SWANA
8750 Georgia Avenue, Suite E-140
Silver Springs, MD 20910-3603
(301) 585-2898

c. Audio-visual Materials, Slides, and Videos

Audio-visual materials are currently available from Integrated Waste Services Association, Educational Development Specialists, SWANA, as well as many equipment vendors and commercial solid waste companies such as Browning Farris Industries (BFI) and Waste Management, Inc. Some equipment vendors that offer videos are:

Gundle Lining Systems
19103 Gundle Road
Houston, Texas 77073
(800) 435-2008

Phillips Fibers
P.O. Box 66
Greenville, SC 29602

Caterpillar, Inc.
100 NE Adams
Kewanee, IL 61443
(309) 853-1002
Lindemann Recycling Equipment, Inc.
500 Fifth Ave.
Suite 1234
New York, NY 10110
(212) 382-0630

Holt Specialty Equipment, Inc.
Highway 41A
Box 99
Eagleville, Tennessee 37060
(615) 274-6660

Slides are also available from many of the commercial vendors listed above, many times at no cost. In addition, slides of actual locations in the Region are very effective in presentations.

d. Publications

Publications are excellent sources of recent developments and current information in the solid waste field as well as sources of current information. Waste Age magazine offers free subscriptions at the present time. Their address was given previously.

e. Contests and Awards

Contests and awards are excellent vehicles to generate public support, provide education, and publicity. Typically contests and awards are directed at school age children but they can also be directed at adult organizations. The United Way has demonstrated that the competitive fever is in all of us.

Contests can be organized to:

1. Name various solid waste facilities
2. Develop the best recycling slogan
3. Develop the best logo/posture
4. Collect the most cans/newspapers/bottles, etc.
5. Pick up the most road side litter

Awards can consist of a rotating trophy, ribbons, buttons, shirts, caps, pencils, picture in the paper, day off from school, or almost any other appropriate award. Commercial sources of these type of items are in the end of this chapter.

f. Speaker’s Bureau

A speaker’s bureau will be organized to give presentations to schools and groups as they are requested. The Region is currently developing a list of speakers.
g. Other

Any other method or technique, original or borrowed, that can be used to educate and inform the public of the Region's goals and objectives should be utilized.

5. Staff and Budget Needs

Projected staff and budget needs are shown in Chapter 11, "Implementation: Schedule, Staffing and Funding".

6. A Funding Plan

A suggested funding plan is shown in Chapter 11, "Implementation: Schedule, Staffing and Funding".

7. Evaluation and Reporting

The Recycling/Reduction/Education Coordinator (see Chapter 11) will report to the regional committee on an annual basis. Included in the report will be a summary of presentations given, the amount of solid waste reduced, reused, and/or recycled, funds expended, and projections for the following year.
A suggested implementation schedule is shown in Chapter 11, "Implementation: Schedule, Staffing, and Funding".

Allocation of Education Responsibility

A suggested allocation of educational responsibilities is shown in Chapter 11, "Implementation: Schedule, Staffing, and Funding".

State Assistance

The Solid Waste Act of 1991 provides for State assistance with the educational programs including guidelines, distributing a catalog of material, training programs, and grants. Each country (and the Authority if an Authority is formed) shall seek the State's assistance in these efforts. Following is a copy of a portion of the Solid Waste Act.

§ 68-211-842. Education program - Guidelines. - The state planning office shall issue guidelines for the education program element of the municipal solid waste region plan. 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.  

§ 68-211-843. Information clearinghouse. - Regional workshops and conferences. - The state planning office shall establish an information clearinghouse to acquire, review, evaluate and distribute a catalog of materials on source reduction and recycling. The state planning office shall also organize and conduct statewide and regional workshops and conferences on solid waste management, source reduction and recycling.  

§ 68-211-844. Educational and training programs. - The state planning office shall collect, prepare and disseminate information and conduct educational and training programs designed to assist in the implementation of solid waste management programs and inform the public of the relationship between an individual's consumption of goods and services and the generation of different types of quantities of solid waste. The state planning office, in consultation with the department of education, shall prepare the information and programs on a statewide basis for the following groups:

(1) Municipal, county and state officials and employees;
(2) Kindergarten through graduate students and teachers;
(3) Businesses that use or could use recycled materials or that produce or could produce protect from recycled materials, and persons who provide support services to those businesses; and
§ 68-211-845. Promotion of education concerning solid waste management. - In order to promote education of children in grades kindergarten through twelve (K-12) concerning solid waste management, source reduction and recycling, the department of education, in conjunction with the state planning office, shall:

1. Review, evaluate and publish a list of approved curriculum materials relative to solid waste management, source reduction and recycling.

2. Sponsor workshops on the curriculum materials for educators;

3. Provide in-service training for teachers on solid waste management, recycling and source reduction, environmental protection and conservation of materials; and


§ 68-211-847. Grants to implement education programs. - After a region’s or county’s plan is approved, the department shall award grants for implementing the education program component of the plan from funds available in the solid waste management fund. [Acts 1991, ch. 451, § 45; T.C.A. § 68-31-847; Acts 1992, ch. 693, § 24.]
### Table 9-1

#### Houston County Schools

<table>
<thead>
<tr>
<th>Erin Elementary School Route 1, Box 154 Erin, TN 37061</th>
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<tbody>
<tr>
<td>Grades K-8</td>
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<tr>
<td>Principal: Mrs. Kathy Harvey</td>
</tr>
<tr>
<td>(615)289-3127</td>
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<table>
<thead>
<tr>
<th>Tennessee Ridge Elementary School Route 1 Tennessee Ridge, TN 37061</th>
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<tr>
<td>Grades K-8</td>
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<tr>
<td>Principal: Ms. Pat Mallory</td>
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<tr>
<td>(615)721-3780</td>
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<table>
<thead>
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<th>Houston County High School Route 2 Box 280 Erin, TN 37061</th>
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<tbody>
<tr>
<td>Grades 9-12</td>
</tr>
<tr>
<td>Principal: Mr. David Bell</td>
</tr>
<tr>
<td>(615)289-4447</td>
</tr>
</tbody>
</table>
Selected Material

CHAPTER 9

PUBLIC INFORMATION AND EDUCATION
### Federal Sources of Information

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>PHONE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center for Environmental Research Information</td>
<td>(513) 569-7562</td>
</tr>
<tr>
<td>Solid and Hazardous Waste (RCRA) and Superfund (CERCLA) Hotline</td>
<td>(800) 424-9346</td>
</tr>
<tr>
<td>Emergency Planning and Community Right to Know Hotline</td>
<td>(800) 535-9810 or 800-535-0202</td>
</tr>
<tr>
<td>Air Control Technology (Clean Air Act)</td>
<td>(919) 541-0800</td>
</tr>
<tr>
<td>Stratospheric Ozone Protection (CFCs - Clean Air Act)</td>
<td>(800) 296-1996</td>
</tr>
<tr>
<td>Toxic Substances Control Act (TSCA) &amp; Asbestos Information/Referral</td>
<td>(202) 554-1404</td>
</tr>
<tr>
<td>Acid Rain (Emissions Trading, Auctions, General Information)</td>
<td>(617) 674-7377</td>
</tr>
<tr>
<td>Storm Water NPDES Permitting Hotline</td>
<td>(703) 821-4823</td>
</tr>
<tr>
<td>Wetland Information</td>
<td>(800) 832-7828</td>
</tr>
<tr>
<td>National Pesticide Telecommunications Network (spill handling, disposal, clean up, health effects)</td>
<td>(800) 858-7378</td>
</tr>
<tr>
<td>National Response Center (reporting oil spills or hazardous substance releases)</td>
<td>(800) 424-8802</td>
</tr>
<tr>
<td>Information Exchange-Hazardous Materials (transportation of hazardous materials)</td>
<td>(800) 752-6367</td>
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<tr>
<td>Centers for Disease Control (CDC)</td>
<td>(404) 639-3535</td>
</tr>
<tr>
<td>Solid Waste Assistance Program</td>
<td>(800) 677-9424</td>
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<tr>
<td>National Fire Protection Association</td>
<td>(617) 770-3000</td>
</tr>
<tr>
<td>National Institute for Occupational Safety &amp; Health (NIOSH)</td>
<td>(513) 533-8236</td>
</tr>
<tr>
<td>National Safety Council</td>
<td>(708) 285-1121</td>
</tr>
<tr>
<td>Nuclear Regulatory Commission</td>
<td>(202) 366-4220</td>
</tr>
<tr>
<td>Occupational Health and Safety Administration (OSHA), Health Standards</td>
<td>(202) 523-6091</td>
</tr>
<tr>
<td>US Department of Transportation (DOT)</td>
<td>(202) 366-4000</td>
</tr>
<tr>
<td>US Environmental Protection Agency (EPA)</td>
<td>(202) 260-2090</td>
</tr>
<tr>
<td>New England Solid Waste Research Library</td>
<td>(617) 573-9687</td>
</tr>
<tr>
<td>Rural Information Center (USDA)</td>
<td>(301) 344-2547</td>
</tr>
<tr>
<td>USEPA Procurement Hotline</td>
<td>(703) 941-4452</td>
</tr>
</tbody>
</table>
Clean Tennessee Program

EDITH BEATY HELLER
STATE COORDINATOR

Suite 113, Building One
MEMPHIS STATE UNIVERSITY
Memphis, TN 38152

901/678-4101
Citizen's Advisory Committee
☆Speaker's Bureau

Partner with Litter Grant Program
☆Public education requirement

Partner with Chamber of Commerce
☆Industry education

Keep America Beautiful System
☆Comprehensive education
☆Regional model
COMMUNITY INVOLVEMENT OBJECTIVES

"Educate The Public" ?? ??

Site a Landfill or Incinerator

"Sell" a Technology or System

Increase Recycling Participation

Support Comprehensive Solid Waste Management
Keep America Beautiful's Systematic Approach—In 1976, following three years of research and field-testing in three cities, the KAB System was introduced nationwide, and today over 480 community-based affiliates are demonstrating the effectiveness of KAB's unique program to address littering and solid waste handling practices.

* The Attitude Change Process—The KAB System is a long term, results-oriented approach targeting the behavioral root of the litter and solid waste issue. The KAB System first identifies the underlying, individual attitudes which cause littered conditions. The "Attitude Change Process" is KAB's proven, 5-step management approach to change negative attitudes and positively reinforce new, learned behaviors to promote proper waste handling.

* Community Organizational Structure ensures broad-based representation and stresses sustained involvement of all sectors of the community. A community-owned and implemented program provides the vital structural basis for developing a renewed sense of ownership among citizens. The involvement stresses "learning by doing," which not only emphasizes volunteer action but, importantly, sustains the involvement to bring improvements in community appearance and sound solutions to solid waste issues.

* Measured Results: the Photometric Index—This photographic measurement technique objectively examines the amount of litter generated at the 7 major sources. Armed with the facts, KAB affiliates establish priorities and design a proactive program strategy. After 3 years, the average litter reduction reported by KAB affiliate communities is 58%, with many communities reporting reductions as high as 80% to 90%.

* Measured Results: The Cost/Benefit Analysis—This annual study further demonstrates the cost effectiveness of the KAB System. In 1992, for every $1 of city, county or state government monies invested in local activities, KAB affiliates report returning an average of $7.19 in benefits—measured in volunteer time, donated goods and services, avoided costs, and reduction in cleanup costs.

School Education Activities and Curriculum Guides—KAB’s official curriculum guides, Waste-In-Place for K-6th graders and Waste: A Hidden Resource for 7th through 12th grade students, are provided to KAB affiliates at a reduced cost when correlated with your state’s education learning goals. Thousands of teachers and educators have attended "Master Teacher Training" workshops using the curricula, and graded them ++ for the interdisciplinary approach and the ease in which the lessons can be implemented in the classroom. To supplement classroom activities, other school materials are provided at little or no cost including; 180 Million Tons of Trash poster, Plastics Recycling by the Numbers, and Pollution Pointers for Elementary Students. Mister Rogers Recycles video is also available from KAB for $19.95 with accompanying activity book for just $1.50.
affiliates, and highlights useful and interesting program and project ideas from around
the country, new education and resource materials and contacts, and other information
to further local affiliate programming.

Field Counseling Services and Guidance—Quarterly contacts are made by
KAB staff and team of 40 National Representatives and Trainers. These calls ensure
local program needs are being met and provide support to our affiliates on all aspects
of application of the KAB System approach. In some cases, field service site visits
are authorized where the National Representative provides training and counseling for
the affiliate’s board of directors and program coordinator.

Communications Support Services—Free media kits are provided to affiliates
to support their local press relations and increase their public exposure. These kits
include written press releases designed for affiliates’ tie-in stories, and collateral
materials, such as camera-ready art.

Special Complimentary Mailings—KAB, Inc., its member companies, and
National Advisory Council representatives provide publications and informational
mailings useful to local affiliates in furthering their activities. Past mailings include
Tennessee Valley Authority’s Organizing and Conducting a Cleanup booklet,
American Paper Institute’s recycling video, Anheuser-Busch’s brochure, entitled
Starting at Home: Recycling to Protect Our Environment, and Recycleman coloring
books from Steel Can Recycling Institute.

Coordinators Advisory Council—Local KAB affiliate coordinators are selected
from seven regions of the country to serve on the Coordinators Advisory Council.
These regional representatives meet quarterly to discuss affiliate needs within their
respective regions and provide KAB staff and its committees with valuable feedback
on program development.

National Awards Program—Recognition and positive reinforcement are vital
to sustaining the necessary involvement to bring about a lasting change in community
pride and appearance. Over 80 prestigious awards are given by KAB each year to
recognize outstanding KAB Systems, civic and youth groups, schools, businesses and
individuals.

Keep America Beautiful, Inc. is a national, non-profit, public education organization, with
over 480 local affiliates nationwide, dedicated to improving waste handling practices in
American communities.

Keep America Beautiful, Inc.
9 West Broad Street
Stamford, Connecticut 06902
203-323-8987
The Most Up-To-Date Information on Solid Waste Management—Guided by KAB’s Solid Waste Committee and Recycling Subcommittee, comprised of representatives in the solid waste management field from both the public and private sectors, KAB makes available numerous education pieces to equip affiliates with up-to-date information to address solid waste issues locally. These materials include:

- Quarterly issues of Focus highlighting important waste disposal issues, from the need for sanitary landfills to the misconceptions of degradability;
- Waste In The Workplace, a small business’ guide for auditing commercial waste, identifying recyclables, minimizing waste, and managing disposal costs;
- Overview: Solid Waste Disposal Alternatives, a 26 page booklet, and a 22 minute video presentation, describes the components of an integrated approach to solid waste handling;
- Recycling Realities, a 16 page educational booklet, detailing the facts, myths and choices involved in recycling, and;

Training Workshops, Seminars, and Program Materials—KAB develops and presents training opportunities for our affiliates covering a variety of topics, including: "Master Teacher Training," "New Coordinator Training," "Building Better Board Relationships," "Managing Today’s Volunteers," "Recycling Realities," "Waste In The Workplace," and more. Education and training materials supplement every workshop, and are designed to reinforce the participants’ understanding of the issues and facilitate implementation at the local level of the training concepts learned at the workshop.

Regional Conferences—Regional conferences are organized each year to reach as many program coordinators and local leaders as possible—in effect, taking KAB to the grassroots. The conference agendas include training sessions, presentations on successful and unique projects that have worked in other communities, seminars which discuss developing trends in litter prevention, and solid waste education focusing regionally on KAB affiliate needs. Importantly, opportunities for KAB program coordinators and local leadership to effectively network and exchange program ideas are integrated into all conferences.

Annual Meeting of KAB Coordinators—Affiliate coordinators, board members, and industry representatives gather each year in Washington, DC to be informed on national trends and issues which can effect their local programs. Presentations, panel discussions by national experts, networking opportunities, and idea exchange are valuable services provided at this conference.
National Programs and Special Projects—existing programs are offered by KAB’s Corporate and National Advisory Council members to local affiliates. In 1992, these included:

* GLAD Bag-a-Thon, the nation’s largest cleanup, sponsored by First Brands Corporation
* RJ Reynolds portable ashtray program, and production of KAB litter prevention film
* Procter & Gamble consumer education program
* James River Corporation’s Team Up for the Environment Little League program
* Lever Brothers’ WISK Power Scoop Up
* Steel Can Recycling Institute’s Steel Can Recycling Award
* America’s Clean Water Foundation’s Year of Clean Water education and awards program
* Girl and Boy Scout Patch programs
* Public Lands Stewardship program
* General Federation of Women’s Clubs solid waste public education program

Some programs and special projects offered in previous years include Kmart teacher kits, Amoco Foam’s Plastics Recycling by the Numbers activity booklet, and the Let’s Not Waste the 90’s videoconference on solid waste issues.

<table>
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<th>Population</th>
<th>Annual Network Service Fee</th>
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<td>100,000 - 174,999</td>
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The Network Service Fee, paid annually by KAB-certified community affiliates, helps defray growing costs of network services (see next page). Communities wishing to be certified should write to KAB and request an Application for Certification.

To become an affiliate, each new community pays a one-time Certification Fee, based on population, to support the initial development and certification of the local KAB System. The Certification Fee is submitted with an Application for Certification to cover the training of your selected representatives at an Organizational Team Training Workshop to learn the fundamentals of implementing a KAB System locally, and; once the certification requirements are completed, the training of the newly-formed organization’s board of directors and staff to guide them in establishing the first year’s program goals.
1. APPLICATION PROCESS

Commitment from area government, business, and civic bodies for application, fees and selection of Founding Team.

2. PRE-CERTIFICATION PROCESS

Founding Team sets up budget, office and hires Coordinator.

3. TRAINING

Coordinator trained for administrative, management, and technical tasks. Founding Team trained to establish organization and recruit volunteers.

4. CERTIFICATION REQUIREMENTS

Completions of Photometric Index, Litter/Solid Waste Survey, and Governing Board appointed. Board attends two training sessions.

5. CERTIFICATION

Celebration ceremony and "public" announcement of Regional KAB System.

6. ANNUAL REQUIREMENTS

Governing Board and Committees, Staff Coordinator, Budget, Payment of Annual Service Fee, Photometric Index Follow-up, Annual Cost/Benefit Analysis, and Bi-annual Reports.
<table>
<thead>
<tr>
<th>Technique</th>
<th>Features</th>
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<th>Disadvantages</th>
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<tr>
<td>Briefings</td>
<td>Personal visit or phone call to key officials or group leaders to announce a decision, provide background information, or answer questions.</td>
<td>Provide background information. Determine reactions before an issue &quot;goes public.&quot; Alert key people to issues that may affect them.</td>
<td>Requires time.</td>
</tr>
<tr>
<td>Feature stories</td>
<td>In-depth story about the siting study in newspapers or on radio and television.</td>
<td>Provide detailed information to stimulate interest in the siting study, particularly at key junctures such as evaluating alternative sites or selecting a preferred site. Often used prior to public meetings to stimulate interest.</td>
<td>Newspaper will present the story editor sees fit—project proponents have no control over how the story is presented, except to provide full information.</td>
</tr>
<tr>
<td>Mailing out key technical reports or environmental documents</td>
<td>Mailing technical studies or environmental reports to other agencies and leaders of organized groups or interests.</td>
<td>Provides full and detailed information to people who are most interested. Often increases credibility of studies because they are fully visible.</td>
<td>Costs money to print and mail. Some people may not even read reports.</td>
</tr>
<tr>
<td>News conferences</td>
<td>Brief presentation to reporters, followed by question-and-answer period, often accompanied by handouts of presenter's comments.</td>
<td>Stimulate media interest in a story. Direct quotes often appear in television/radio. Might draw attention to an announcement or generate interest in public meetings.</td>
<td>Reporters will only come if the announcement/presentation is newsworthy. Cannot control how the story is presented, although some direct quotes are likely.</td>
</tr>
<tr>
<td>Newsletters</td>
<td>Brief description of what is going on in the siting study, usually issued at key intervals for all people who have shown an interest in the study.</td>
<td>Provide more information than can be presented through the media to those people who are most interested. Often used to provide information prior to public meetings or key decision points. Also maintain visibility during extended technical studies.</td>
<td>Require staff time and cost money to prepare, print, and mail. Stories must be objective and credible so people will react to newsletters as they were propaganda.</td>
</tr>
<tr>
<td>Technique</td>
<td>Features</td>
<td>Advantages</td>
<td>Disadvantages</td>
</tr>
<tr>
<td>----------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Newspaper inserts</td>
<td>Much like a newsletter, but distributed as an insert in a newspaper.</td>
<td>Reach the entire community with important information such as project need and alternative sites being considered. Is one of the few mechanisms for reaching everyone in the community through which you can tell the story your way.</td>
<td>Requires staff time to prepare insert, and distribution costs money. Must be prepared to newspaper's layout specifications. Potential negative reaction to use public funds for this purpose exists.</td>
</tr>
<tr>
<td>News releases</td>
<td>A short announcement or news story issued to the media to get interest in media coverage of the story.</td>
<td>May stimulate interest from the media. Useful for announcing meetings or major decisions or as background material for future media stories.</td>
<td>May be ignored or not read. Cannot control how the information is used.</td>
</tr>
<tr>
<td>Paid advertisements</td>
<td>Advertising space purchased in newspapers or on radio or television.</td>
<td>Effective for announcing meetings or key decisions. Story presented the way you want.</td>
<td>Advertising space can be costly. Radio and television may entail expensive production costs to prepare the ad. Potential negative reaction to use of public funds for this purpose exists.</td>
</tr>
<tr>
<td>Presentations to civic and technical groups</td>
<td>Deliver presentations, enhanced with slides or viewgraphs, to key community groups</td>
<td>Stimulates communication with key community groups. Can also provide in-depth feedback.</td>
<td>Few disadvantages except some groups may be hostile.</td>
</tr>
<tr>
<td>Press kits</td>
<td>A packet of information distributed to reporters.</td>
<td>Stimulates media interest in the story. Provides background information which reporters use for future stories.</td>
<td>Has few disadvantages, except it may be ignored. Cannot control how information is used.</td>
</tr>
<tr>
<td>Public service announcements</td>
<td>Short announcement provided free of charge by radio and television stations as part of their public service obligations.</td>
<td>Useful for making announcements such as for public meetings.</td>
<td>Many organizations compete for the same space. Story may not be aired or may be aired at hours when there are few listeners.</td>
</tr>
<tr>
<td>Technique</td>
<td>Features</td>
<td>Advantages</td>
<td>Disadvantages</td>
</tr>
<tr>
<td>----------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Advisory groups/ task forces</td>
<td>A group of representatives of key interested parties is established. May be a policy, technical, or citizen advisory group.</td>
<td>Provide oversight to the siting process. Promote communication between key constituencies. Anticipate public reaction to publications or decisions. Provide a forum for reaching consensus.</td>
<td>Potential for controversy exists if &quot;advisory&quot; recommendations are not followed. Requires substantial commitment of staff time to provide support to committees.</td>
</tr>
<tr>
<td>Focus groups</td>
<td>Small discussion groups established to give &quot;typical&quot; reactions of the public. Conducted by professional facilitator. Several sessions may be conducted with different groups.</td>
<td>Provide in-depth reaction to publications, ideas, or decisions. Good for predicting emotional reactions.</td>
<td>Get reactions, but no knowledge of how many people share those reactions. Might be perceived as an effort to manipulate the public.</td>
</tr>
<tr>
<td>Hotline</td>
<td>Widely advertised phone number to handle questions or provide centralized source of information about the siting.</td>
<td>Gives people a sense that they know whom to call. Provides a one-step service of information. Can handle two-way communication.</td>
<td>Is only as effective as the person answering the hotline phone.</td>
</tr>
<tr>
<td>Interviews</td>
<td>Face-to-face interviews with key officials, interest group leaders, or key individuals.</td>
<td>Can be used to anticipate issues or anticipate the reactions of groups to a decision. Can also be used to assess &quot;how are we doing.&quot;</td>
<td>Requires extensive staff time.</td>
</tr>
<tr>
<td>Hearings</td>
<td>Formal meetings where people present formal speeches and presentations.</td>
<td>May be used as a &quot;wrap-up meeting&quot; prior to final decision. Useful in preparing a formal public record for legal purposes.</td>
<td>Exaggerates differences. Does not permit dialogue. Requires time to organize and conduct.</td>
</tr>
<tr>
<td>Meetings</td>
<td>Less formal meetings for people to present positions, ask questions, and so forth.</td>
<td>Highly legitimate form for the public to be heard on issues. May be structured to permit small group interaction—anyone can speak.</td>
<td>Unless small-group discussion format is used, permits only limited dialogue. May get exaggerated positions or grandstanding. Requires staff time to prepare for meeting.</td>
</tr>
<tr>
<td>Technique</td>
<td>Features</td>
<td>Advantages</td>
<td>Disadvantages</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Workshops</td>
<td>Smaller meetings designed to complete a task.</td>
<td>Very useful for tasks such as identifying siting criteria or evaluating sites. Permits maximum use of dialogue, good for consensus-building.</td>
<td>Limitations on size may require several workshops in different locations. Is inappropriate for large audiences. Requires staff time for multiple meetings.</td>
</tr>
<tr>
<td>Plebiscite</td>
<td>Citywide election to decide where or whether a facility should be built.</td>
<td>Provides a definite, and usually binding, decision on where or whether a facility should be built.</td>
<td>&quot;Campaign&quot; is expensive and time-consuming. General public may be susceptible to uninformed emotional arguments.</td>
</tr>
<tr>
<td>Polls</td>
<td>Carefully designed questions are asked of a portion of the public selected as representative of public opinion.</td>
<td>Provides a quantitative estimate of general public opinion.</td>
<td>Provides a &quot;snapshot&quot; of public opinion at a point in time—opinion may change. Assumes all viewpoints count equally in decision. Costs money and must be professionally designed.</td>
</tr>
</tbody>
</table>
**佣员专案**

- 地址：5505 East Carson Street, Suite 250, Lakewood, CA 90713-3093

**Order Placed By:**

**Telephone:**

**Date:**

**BILL TO:**

**SHIP TO:** (Street address please)

**Purchase Order No.:**

**Imprinting:** YES [ ] NO [ ]

---

**COMPLETE UNITS**

(See other side for materials included in each unit.)

<table>
<thead>
<tr>
<th>UNIT</th>
<th>MAJOR THEME</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten</td>
<td>Conserving Trees &amp; Other Resources</td>
<td>$40.00</td>
</tr>
<tr>
<td>Grade 1</td>
<td>Conserving Natural Resources</td>
<td>$40.00</td>
</tr>
<tr>
<td>Grade 2</td>
<td>The 3 R's — Reduce, Reuse, Recycle</td>
<td>$40.00</td>
</tr>
<tr>
<td>Grade 3</td>
<td>Creating Less Pollution</td>
<td>$40.00</td>
</tr>
<tr>
<td>Grade 4</td>
<td>Reducing Solid and Liquid Waste</td>
<td>$40.00</td>
</tr>
<tr>
<td>Grade 5</td>
<td>Pollution Solutions</td>
<td>$40.00</td>
</tr>
<tr>
<td>Grade 6</td>
<td>Sustaining Natural Resources</td>
<td>$40.00</td>
</tr>
</tbody>
</table>

**SCHOOL PACKS**

- **K - 3** includes four units—one each for grades K-3, and one Think Earth video: $120.00
- **4 - 6** includes three units—one each for grades 4-6, and one "e" video: $95.00

**ADDITIONAL MATERIALS**

<table>
<thead>
<tr>
<th>Units Without Video</th>
<th>K</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Videos</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$25.00</td>
</tr>
<tr>
<td>Badges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$10.00</td>
</tr>
<tr>
<td>Watches</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$29.95</td>
</tr>
<tr>
<td>T-Shirts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$14.95</td>
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<tr>
<td>Tot-Bag</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$7.50</td>
</tr>
<tr>
<td>Regular Tree Water</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$9.99</td>
</tr>
<tr>
<td>Mini Tree Water</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$4.99</td>
</tr>
</tbody>
</table>

**Quantity Discounts**

- Select your discount on total number of units purchased.
  - 50 - 249 units: 5% discount
  - 250 - 499 units: 10% discount
  - 500 units or more: 15% discount

**Subtotal**

$______

**Quantity Discount**

$______

**Materials Total**

$______

Note: The costs for shipping, and, if applicable, imprinting and sales tax (California only) will be added when invoiced.

- Spanish Translations (family activity sheets and stories) for grades K-3
- Blackline Masters reproduced in sets of 35 for each unit

**Now Available!**
<table>
<thead>
<tr>
<th>KINDERGARTEN</th>
<th>GRADE 1</th>
<th>GRADE 2</th>
<th>GRADE 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;THINK EARTH&quot; Video</td>
<td>&quot;THINK EARTH&quot; Video</td>
<td>&quot;THINK EARTH&quot; Video</td>
<td>&quot;THINK EARTH&quot; Video</td>
</tr>
<tr>
<td>Teacher guide</td>
<td>Teacher guide</td>
<td>Teacher guide</td>
<td>Teacher guide</td>
</tr>
<tr>
<td>Poster, &quot;THINK EARTH&quot;</td>
<td>Poster, &quot;THINK EARTH&quot;</td>
<td>Poster, &quot;THINK EARTH&quot;</td>
<td>Poster, &quot;THINK EARTH&quot;</td>
</tr>
<tr>
<td>Poster, &quot;The Environment&quot;</td>
<td>Poster, &quot;Everything Comes From The Environment&quot;</td>
<td>Poster, &quot;Reduce, Reuse, Recycle&quot;</td>
<td>Poster, &quot;Our Community&quot;</td>
</tr>
<tr>
<td>Story cards, &quot;Jay's Tree&quot;</td>
<td>Story cards, &quot;Bye, Bye, Bernie&quot;</td>
<td>Story cards, &quot;The Rascals&quot;</td>
<td>Story cards, &quot;Trashbox&quot;</td>
</tr>
<tr>
<td>Blackline masters:</td>
<td>Blackline masters:</td>
<td>Blackline masters:</td>
<td>Blackline masters:</td>
</tr>
<tr>
<td>• Practice exercises</td>
<td>• Pretest</td>
<td>• Pretest</td>
<td>• Pretest</td>
</tr>
<tr>
<td>• Family activity sheet</td>
<td>• Posttest</td>
<td>• Posttest</td>
<td>• Posttest</td>
</tr>
<tr>
<td>• Mini-poster</td>
<td>• Practice exercises</td>
<td>• Practice exercises</td>
<td>• Practice exercises</td>
</tr>
<tr>
<td>• Hanging badge</td>
<td>• Family activity sheet</td>
<td>• Family activity sheet</td>
<td>• Family activity sheet</td>
</tr>
<tr>
<td>• Mini-posters</td>
<td>• Mini-poster</td>
<td>• Mini-posters</td>
<td>• Mini-poster</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GRADE 4</th>
<th>GRADE 5</th>
<th>GRADE 6</th>
<th>THINK EARTH VIDEO (VHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;E&quot; Video</td>
<td>&quot;E&quot; Video</td>
<td>&quot;E&quot; Video</td>
<td>THINK EARTH is an animated video that introduces children to the</td>
</tr>
<tr>
<td>Teacher guide</td>
<td>Teacher guide</td>
<td>Teacher guide</td>
<td>environment and to the need for all of us to conserve</td>
</tr>
<tr>
<td>Poster, &quot;Trash: Where Does It Go?&quot;</td>
<td>Poster, &quot;What Causes Pollution?&quot;</td>
<td>Poster, &quot;Ways to Help Think Earth&quot;</td>
<td>natural resources, reduce waste, and minimize pollution.</td>
</tr>
<tr>
<td>Poster, &quot;Water: Where Does It Go?&quot;</td>
<td>Poster, &quot;Ways to Help Think Earth&quot;</td>
<td>&quot;E&quot; Video</td>
<td>&quot;E&quot; is a live-action video incorporating computer graphics, animation,</td>
</tr>
<tr>
<td>Poster, &quot;Ways To Help Think Earth&quot;</td>
<td>HAZARDOUS AND SOLID WASTE CARDS</td>
<td>&quot;E&quot; Video</td>
<td>and environmental footage. Part one introduces students to the</td>
</tr>
<tr>
<td>Blackline masters:</td>
<td>Blackline masters:</td>
<td>Blackline masters:</td>
<td>environmental problems of overusing natural resources, creating too</td>
</tr>
<tr>
<td>• Pretest</td>
<td>• Pretest</td>
<td>• Pretest</td>
<td>much waste, and polluting the environment. In part two, students</td>
</tr>
<tr>
<td>• Posttest</td>
<td>• Posttest</td>
<td>• Posttest</td>
<td>learn what they can do to help the environment.</td>
</tr>
<tr>
<td>• Practice exercises</td>
<td>• Practice exercises</td>
<td>• Practice exercises</td>
<td></td>
</tr>
<tr>
<td>• Take-home exercises</td>
<td>• Family activity sheet</td>
<td>• Family activity sheet</td>
<td></td>
</tr>
<tr>
<td>• Family activity sheet</td>
<td>• Mini-posters</td>
<td>• Mini-posters</td>
<td></td>
</tr>
<tr>
<td>• Mini-posters</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

THINK EARTH is an animated video that introduces children to the environment and to the need for all of us to conserve natural resources, reduce waste, and minimize pollution.
Our most valued acknowledgments are those we receive from the students, teachers, parents, and sponsors—like you.

"What a great program—easy to teach. I like the hands-on involvement." [Teacher]

"The value held the students' attention extremely well! This tied in nicely with our new state adopted social studies curriculum. Thank you!" [Teacher]

"The children were surprised to see how little they knew. They answered only 35% on the pretest. But they averaged 84% on the posttest." [Teacher]

"Tell me all the rights which I have to roam, and when I grow up I'll make a solar-powered car." [Student]

"Till I get home and discuss the Think Earth program with my mother, we have decided to do many things to help." [Student]

"Thanks so much for sharing the Think Earth Curriculum with our kids. My son has come home and explained what we have been learning. Often wanted their parents to help, too. And I can't believe it was free!" [Parent letter to sponsor]

"My agency could never have produced such a program. We're getting exposure in an educational area that we could never have achieved by ourselves." [Funding]

The Think Earth Environmental Education Program has been developed to be environmentally-conscious and cost-effective. Materials are printed on recycled paper, and blackline masters are provided to allow teachers to reproduce just the number of student handouts they need. Providing reproducible masters also keeps your costs down since no rework is needed. Teachers will use the Think Earth program year after year at a one-time cost to you.

Educational Development Specialists can provide you with a variety of personal services to help you implement the Think Earth program in your community, including:

- Free teacher brochures
- Imprinting
- Promotional items
- And much more!

For ordering and other information, write or call:
Educational Development Specialists
3503 E. Carson Street, Suite 250
Lakewood, CA 90713

(310) 420-6814 • Fax (310) 420-1485

Printed on Recycled Paper
Grades K-3

Think Earth Units contain...

- Teacher guide, with
  - procedures for 24 lessons
  - background enrichment activities
  - background information
  - children's literature list
  - additional sources for information & materials
- 2-3 full-color posters
- Story cards
- Resource/Product/Tool cards
- Reproducible masters for:
  - project and posted
  - student handouts
  - reproducible test
  - mini-poster
  - family activity sheet
- Video

K-3 Video
The video for grades K-3, entitled "Think Earth," is an animated presentation that introduces children to how we use natural resources from the environment and shows what we can do to help the environment. The video contains two 7-minute versions of "Think Earth." The first version is narrated. The second version is presented without words so that children, both English speaking and non-English speaking, can supply their own narration.

4-6 Video
The video for grades 4-6, entitled "Let's Do It," is a 27-minute, live-action piece that incorporates computer-generated animation and environmental footage. In part 1, "Let's Do It," a surev character who magically appears through a computer, presents several environmental problems. In part 2, possible solutions to these problems are explored. Students learn that if everyone helps, the environment will be s
Suppose...

All of the children in your community began to:

- recycle papers, bottles, and cans
- dispose of wastes properly
- walk, bike, or carpool whenever possible
- use electricity, water, natural gas, paper, and other resources wisely

Students in your community can learn these and other responsible environmental behaviors with the Think Earth Environmental Education Program. By providing Think Earth to the schools in your area, you can show your commitment to the community, to education, and to the environment, while also teaching a lot of kids and their families to "think earth."

Think Earth is a comprehensive environmental education program for children in Kindergarten through grade 6. The program addresses all elements of the environment—air, land, water, and energy. Students learn the importance of a clean, healthy environment and learn what they can to conserve natural resources, reduce waste, and minimize pollution.

An instructional unit is provided for each grade level of the Think Earth program. Each unit integrates all elements of the environment, while emphasizing a specific theme.

Grades 4-6

- The Grade 4 Unit focuses on reducing solid and liquid wastes. Students learn where our trash and wastewater come from and where they go. They discover ways to reduce the amount of solid waste, hazardous waste, and wastewater we produce, which will help conserve natural resources, limit pollution, and keep the environment clean.
- The Grade 5 Unit focuses on pollution solutions. Students learn about the causes and effects of air pollution, water pollution, and ground pollution, and how to reduce pollution. They identify ways that everyone can help minimize pollution.
- The Grade 6 Unit focuses on sustaining natural resources. Students learn about the benefits of natural resources and learn that we have to conserve our natural resources if we are to conserve natural resources and use them in sustainable ways.

The Think has been the number of people among these.

- The Potential of a Challenging Nation's Hopeful
- The Ever for K-1 the Savior of Man
- The Chrt Excelent Educate Quality South of Manag
- The A Top Think eduction by Annci Educato
# Table of Contents

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Chapter 10

Problem Wastes

General

The Solid Waste Management Act addresses four areas of problem wastes which must be addressed. Some of these wastes are banned from disposal in Class I landfills and others are simply acknowledged as items in need of evaluation. This section will examine these wastes and the Region’s options as to their handling and disposal.

Household Hazardous Waste

Household Hazardous Waste (HHW) are those wastes discarded from home which are listed by The EPA as hazardous or displaying hazardous characteristics. These include paints, aerosol sprays, medicines, pesticide batteries, etc. These wastes pose serious problems to the environment when improperly discarded. Class I landfills are not designed to address the unique problems presented by these wastes. It is estimated that each household in Tennessee generates 15 pounds of HHW annually. Table 10-1 shows the estimated annually generation rates for the region.

<table>
<thead>
<tr>
<th>County</th>
<th>Number of Households</th>
<th>HHW Generated Annually (Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Houston</td>
<td>2,683</td>
<td>20</td>
</tr>
</tbody>
</table>

1 from Needs Assessment, Page 1-4

To help in the proper disposal of HHW, the State of Tennessee has established a mobile collection and disposal program. This program allows each county in the state to schedule a HHW collection event at which the mobile collection contractor will accept these wastes for transportation and disposal at a licensed facility. It is the county’s responsibility to schedule and advertise these events.

Houston County will schedule such events at least annually for the duration of the program. Should public response warrant, these events will be scheduled more frequently.

The county will select and provide a site at which the collection event can be held. These sites can be located at the convenience center with adequate space for the event. The county will provide a single man, the recycling coordinator if available, to aid in security, traffic control and emergency response. Area volunteers may also be requested if it is deemed necessary. It is expected that this system will be sufficient for initial collection events. Collection events will be evaluated and scheduling revised as necessary following each event.
The initial collection events should be relatively inexpensive with the major cost being for the education and advertising needed to inform the citizens of the event and its purpose. It is expected that such events can be held for under $1,000 for the duration of the State Program. At the termination of the State program, the response to and expense of such services will be examined and continued as needed.

As a means of reducing the HHW disposed of at Class I landfills, public outreach program will be utilized. It is expected that the education and public outreach program will begin at the commencement of the school year. County schools will be used as a major source of public communication. Area media will be used to disseminate information as the collection date approaches and the newspaper will be asked to announce the event throughout the month preceding the event. An implementation schedule follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Fall 1994</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commencement of School Based Education</td>
<td></td>
</tr>
<tr>
<td>Begin Newspaper Advertisements</td>
<td>Fall 1994</td>
</tr>
<tr>
<td>Announce Collection Date</td>
<td>Fall 1994</td>
</tr>
<tr>
<td>Collection Date</td>
<td>Fall 1994</td>
</tr>
</tbody>
</table>

This schedule will be evaluated and revised as the program progresses.

A list of materials which will be accepted under the State’s Household Hazardous Waste Collection Program follows.

It is the goal and objection of Houston County to collect as much of the household hazardous waste produced in the county as practical. The county will hold a collection day at least once per year.
### Table 10-2
List of Acceptable Materials

**Household Hazardous Waste Mobile Collection and Disposal Program**

<table>
<thead>
<tr>
<th>Category</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Cleaners</td>
<td>Drain Openers, Oven Cleaners, Wood and Metal Cleaners and Polishers, Toilet Bowl Cleaners, Disinfectants</td>
</tr>
<tr>
<td>Automotive Products</td>
<td>Oil and Fuel Additives, Grease and Rust Solvents, Carburetor and Fuel Injector Cleaners, Air Conditioning Refrigerants, Starter Fluids, Body Putty, Anti-Freeze/Coolant, Waste Oil</td>
</tr>
<tr>
<td>Home Maintenance and Improvement Products</td>
<td>Paint Thinners, Paint Strippers and Removers, Adhesives, Paint</td>
</tr>
<tr>
<td>Lawn and Garden Products</td>
<td>Herbicides, Pesticides/Rodenticides, Fungicides/Wood Preservatives</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>Batteries, Fingernail Polish Remover, Pool Chemicals, Photo Processing Chemicals, Low-level Radioactive Compounds, Medicines/Drugs, Reactives (aerosols/compressed gas)</td>
</tr>
</tbody>
</table>
Waste Tires

Whole waste tires will no longer be allowed to be disposed of in Class I landfills after December 1, 1994. The county will begin collecting waste tires. When a sufficient number of tires are collected, the county will contact the State shredding unit which will come to the site and shred the tires. After shredding of the tires, they will be disposed of in the landfill being used by the county.

Most counties must contact the state shredder three or four times a year. During storage, the tires are to be covered with a tarp and sprayed to control insect populations. Access to the area is to be controlled.

At present it is estimated that not all of the waste tires within the region are disposed of through the solid waste system. Some tires are burned or dumped throughout the region. Any waste tires illegally dumped will be collected as part of the region's litter control program and properly disposed of. A waste tire storage site has been established at the convenience center.

Waste Oil

Waste oil and used automobile fluids are not currently handled in an organized manner. As mandated by T.C.A. § 68-31-866, Houston County will provide a single site to collect these items and store them until transfer is possible. This site will be located at the convenience center and will accept all items mandated above. The facility will comply with all applicable regulations for "do-it-yourself" used oil collection centers. The site is expected to be operational in late 1994. The county will contract with private disposal companies to properly dispose of the collected materials. The proper disposal of these fluids will be part of the education plan of Chapter 9.

As an alternative, the county may apply for a grant to install a waste oil burner. The county may purchase a used oil burner and install it at the county highway garage or other location in an effort to use the heat produced. Information is included on this option at the end of this chapter. The state currently offers grants to purchase such equipment.

Lead Acid Batteries

Lead acid batteries are currently not accepted at most landfills. There are several private industries which buy back such batteries for recycling. These include most facilities which sell these batteries within the region. This system efficiently handles the batteries in the region and the disposal through these facilities will be encouraged by the county and by convenience center personnel.

In addition, as mandated by T.C.A. § 68-31-866, Houston County will provide a single site to collect these items and store them until transfer is possible. This site will be located at the convenience center and will accept all items mandated above. The facility will comply with all applicable regulations for lead acid battery collection centers. The site is expected to be operational in late 1994. Since the collection site will be incorporated into an existing or previously planned site, the cost of lead battery collection should be minimal. Also, since these items are regularly purchased for recycling, the cost of disposing of these items should also be minimal.
Litter

The Houston County Region has an estimated unmanaged waste amount of 3,188 tons of waste annually. See Table 2-5. Much of this is litter along highways. Houston County has an Adopt-a-Highway program to aid in cleaning up major highways.

Advertisement

Each county will advertise to the general public the day(s) and hours and location where the HHW collection will take place. Following is copy of § 68-211-829 of the Solid Waste Act of 1991.

Each county or solid waste authority, if created, shall provide a service site and shall advertise in newspapers of general circulation in the county the day(s) and hours and location where the household hazardous waste will be collected by the mobile unit. The advertisements shall also identify examples of household hazardous waste that the mobile unit will receive. The county or solid waste authority shall also furnish at least one (1) person to represent the county or solid waste authority at the service site on the days of collection, who will assist the persons operating the mobile collection unit. [Acts 1991, ch. 451, § 35; T.C.A. § 68-31-829.]

Special Wastes

Special wastes (as defined by the Division of Solid Waste Management) will be dealt with on an individual, case-by-case basis, as required by the Division of Solid Waste Management.

Grants

The Tennessee Legislature passed the Used Oil Collection Act of 1993 establishing a program for the collection and safe disposal of used motor oil. It is funded by a new 2 cent tax on motor oil that went into effect July 1, 1993. The tax revenues will fund grants to assist local governments in establishing collection sites for used oil, educational programs, and technical assistance in identifying and implementing acceptable used oil disposal plans. The grants will be administered by the special wastes section of the Tennessee Department of Environment and Conservation. The contact person is Mr. Don Manning at (615) 532-0076.

The State will also award a grant for the collection of HHW to counties with a 1980 population of 100,000 or more or to municipalities with a 1980 population of 287,700 or more (§ 68-211-828). Houston County does not qualify for this grant.

Summary

Houston County will establish a site for the residents to bring their household hazardous wastes for proper disposal. The collection site and date will be well publicized and coordinated with the state appointed contractor. Houston County will also establish a waste tire storage site, a waste oil collection site, and a battery storage site at the convenience center.
Flyers Distributed by the

Tennessee Department of Environment and Conservation
About Oil Filters:

If you change your oil filter, drain the old one by punching an air hole in the top and drain a minimum of 12 hours.

Dispose of the oil filter only after it is properly drained.

Check to see if there is a filter crushing and recycling program in your community.

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

Division of Solid Waste Assistance
Special Wastes Section
14th Floor, L & C Tower
401 Church Street
Nashville, TN 37243-0455
(615) 532-0091

What Tennessee Do-It-Yourselfers Should Know About Disposing of Used Motor Oil

TENNESSEE WASTEWISE

Managing Waste Today... Protecting Tomorrow

The information contained in this pamphlet is based on current state laws and best management practices. Recommendations may change over time as new laws and information are developed. Contact the Division of Solid Waste Assistance if you have any questions.

Tennessee Department of Environment and Conservation. Authorization No. 327421, 2,000 copies. This public document was promulgated at a cost of $.09 per copy. January 1993.

Printed on recycled-content paper
BEST MANAGEMENT PRACTICES

Buy only what you need.

Give leftovers to someone who can use them.

Always store such fluids in the original container.

Take recyclable fluids to businesses or locations that recycle.

Safely store and donate any unrecyclable fluids to your county's household hazardous waste collection program if the fluid is advertised as one the contractor will accept.

DIVISION OF SOLID WASTE ASSISTANCE
SPECIAL WASTE SECTION
14th FLOOR, L & C TOWER
401 CHURCH STREET
NASHVILLE, TN 37243-0455
(615) 532-0091

PROPER DISPOSAL OF AUTOMOTIVE FLUIDS

TENNESSEE WASTEWISE

Managing Waste Today... Preventing Tomorrow

The information contained in this pamphlet is based on current state laws and best management practices. Recommendations may change over time as new laws and information are developed. Contact the Division of Solid Waste Assistance if you have questions.

Tennessee Department of Environment and Conservation. Authorization No. 327425; 4,000 copies. This public document was promulgated at a cost of $.05 per copy. February 1993.

Printed on recycled-content paper
TO AVOID DISPOSAL PROBLEMS:
- Buy only what you need
- Use it up before buying more
- Apply another coat
- Store cans upside down to prevent hardening or moisture damage (be certain the lid is securely in place).
Proper Handling and Disposal of Waste Tires

Division of Solid Waste Assistance
Special Wastes Section
14th Floor, L & C Tower
401 Church Street
Nashville, TN 37243-0455
(615) 532-0091

Tennessee Department of Environment and Conservation. Authorization No. 327422; 4,000 copies. This public document was promulgated at a cost of $.05 per copy. February 1993.
REMEMBER:

* Buy only what you need to apply.

* Read the label instructions and apply product accordingly.

* Store pesticides in their original container in a safe, dry, well-ventilated area.

* Never bury or pour pesticides onto the ground.

* Triple rinse empty liquid containers and render them unusable.

WHO CAN I CONTACT?

Local government agencies and agricultural organizations may be contacted for information.

Division of Solid Waste Assistance
Special Wastes Section
14th Floor, L & C Tower
401 Church Street
Nashville, TN 37243-0455
(615) 532-0091

TENNESSEE WASTEWISE

Tennessee Department of Environment and Conservation. Authorization No. 327423; 4,000 copies. This public document was promulgated at a cost of $.05 per copy. February 1993.

Printed on recycled content paper
WASTE REDUCTION TIPS:

BUY ONLY THE AMOUNT YOU NEED.

USE ALL OF THE PRODUCT (NO WASTE).

GIVE LEFTOVER PRODUCTS TO SOMEONE WHO CAN USE THEM.

CHOOSE AND USE SAFER PRODUCTS.

HANDLE ALL CHEMICALS WITH CARE.

READ THE LABEL FIRST FOR INFORMATION.

PROPERLY DISPOSE OF UNUSED LEFTOVERS.

Contact your local county officials to see if a household hazardous waste collection program is being planned in your county and if household cleaners will be accepted.

TENNESSEE WASTEWISE

Managing Waste Today... ... Preserving Tomorrow

Division of Solid Waste Assistance
Special Wastes Section
14th Floor, L & C Tower
401 Church Street
Nashville, TN 37243-0455
(615) 532-0091

HOUS EHO LD
C LEANSERS

POTENTIAL HAZARDOUS WASTE IN THE HOME

The information contained in this brochure is based on current state laws and best management practices. Recommendations may change over time as new laws and information are developed. Contact the Division of Solid Waste Assistance if you have any questions.

Tennessee Department of Environment and Conservation, Authorization No. 327432, 4,000 copies. This public document was promulgated at a cost of $.05 per copy, March 1993.

Printed on recycled-content paper
SUGGESTED DISPOSAL

In the absence of a better method for the proper disposal of dry cell batteries, the suggested procedure is to put them in a sealed plastic bag and place in the trash.

The practice of storing used batteries in the home could create a potential danger for small children who may ingest button batteries or put them in their ears. Possible leakage from other types of dry cell batteries may also cause injury and property damage.

The use of rechargeable batteries could reduce the volume of batteries sent to landfills. Rechargeable batteries and a battery charger may be practical substitutes for dry cell batteries in the home.

WHAT WE KNOW ABOUT DRY CELL BATTERIES AND THEIR PROPER DISPOSAL

TENNESSEE WASTEWISE

Tennessee Department of Environment and Conservation. Authorization No. 327439, 4,000 copies. This public document was promulgated at a cost of $.05 per copy. March 1993.
REMEMBER:

Don't Trash

Don't Burn

DO Recycle!

Lead-Acid Batteries.

Division of Solid Waste Assistance
Special Wastes Section
14th Floor, L & C Tower
401 Church Street
Nashville, TN 37243-0455
(615) 532-0091

PROPER DISPOSAL OF LEAD-ACID BATTERIES

TENNESSEE WASTEWISE

Managing Waste Today... Promoting Tomorrow

The information contained in this pamphlet is based on current state laws and best management practices. Recommendations may change over time as new laws and information are developed. Contact the Division of Solid Waste Assistance if you have any questions.

Tennessee Department of Environment and Conservation, Authorization No. 327420, 2,000 copies. This public document was promulgated at a cost of $.09 per copy. January 1993.

Printed on recycled-content paper
Grant Information and Grant

Application for Waste Oil Burners
MEMORANDUM

TO: All Counties, Cities, Solid Waste-Planning Boards, and Other Potentially Eligible Parties

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

DATE: March 7, 1994

SUBJECT: Used Oil Collection Act of 1993 Policy Guide, Grant Guidance and Application

The Used Oil Collection Act of 1993 made possible the establishment of grant programs to establish used oil collection sites, to develop and implement educational programs for proper handling and disposal of used oil, and purchase equipment that burns used oil for fuel.

We are enclosing a policy guide, grant guidance document, and application form which provides pertinent details regarding eligibility and application requirements. We have also included a list of potential vendors that we found as we researched available equipment. This list is provided for your convenience only and does not represent all available vendors nor does this list endorse any vendors listed.

We look forward to working with you on your used oil program. If you need assistance in completing your application, please contact Kathy Fowlkes at (615) 532-0087.

PED/kf

Enclosures
THE USED OIL COLLECTION ACT OF 1993
T.C.A. 68-211-1005

Grants for Used Oil Collection Centers
Educational Programs and
Equipment That Burns Used Oil for Fuel

Grant Application Guidelines

Statutory Authority

T.C.A. 68-211-1005 states that the fund may be used as follows:

(2) The department may award grants, subsidies and/or loans to municipalities, counties and counties having a metropolitan form of government to establish and operate used oil collection centers at publicly owned facilities or other suitable public or private locations; and provide technical assistance to persons who organize such programs.

(3) The department may award grants or subsidies to local governments to purchase equipment which burns oil as fuel. In awarding such grants or subsidies, priority shall be given to local governments who establish used oil collection centers.

(5) The department may award grants to develop and implement educational programs to encourage proper handling, disposal and recycling of used oil.

(7) The department may award grants to develop and implement programs to provide direct incentives to for-profit and not-for-profit entities to establish and operate used oil collection centers.

In addition to the above referenced code, T.C.A. 68-211-866(b) of the Solid Waste Management Act of 1991 states: "By January 1, 1995, each county shall provide directly, by contract or through a solid waste authority at least one (1) site to receive and store waste tires, used automotive oils and fluids, and lead-acid batteries, if adequate sites are not otherwise available in the county for use of the residents of the county. A single site need not receive all items for which collection is required in this section, but all items listed above shall have at least one (1) site for reception and storage in the county. The operator of any such sites provided by a county shall sell and/or cause the transfer of the recyclable materials stored at these sites to a commercial recycler or a regional receiving facility for such wastes as often as practicable." [Acts 1991, ch. 451, p. 33; T.C.A., 68-31-866.]

Eligibility

Municipalities, counties, and counties having a metropolitan form of government (local governments) may apply for one or all of the grants mentioned above. For-profit and not-for-profit entities may only apply for used oil collection center grants. All applicants must include a letter from the Regional Solid Waste Planning Board confirming the proposal is consistent with the Regional Solid Waste Plan.

Used Oil Collection Centers

Applicants must apply to the Division of Solid Waste Management to receive a used oil collection center identification number. Confirmation of the center’s registration will be required prior to making any payments pursuant to the grant.
Allowable costs for grants to establish a used oil collection center (T.C.A. 68-211-1011) will include the purchase of the used oil collection/storage tank or container and oil filter crushing equipment. Oil filter cutters will not be considered for funding at this time. Used oil chlorine/halogen detection kits to determine if oil is contaminated, will also be considered for funding. The collection/storage tank or container may include a compartment for the collection and storage of used oil filters. Collection/storage tanks and containers must comply with federal regulations established under Chapter 1200-1-11-.11, Standards for the Management of Used Oil. Grant funds may not be used to purchase underground storage tanks or containers. Site preparation for placement of the collection/storage tank should comply with the “Used Oil Collection and Recycling Program Policy Guide” established by the Division of Solid Waste Assistance. In addition, site preparation and costs associated with preparing a spill containment area will be considered for funding. Costs to upgrade existing used oil collection center sites and equipment to comply with the recommendations of the “Used Oil Program Policy Guide” will also be considered for funding. All cost estimates and manufacturer specifications sheets for these activities should be included with the application. Requests to purchase collection/storage tanks with capacities exceeding 300 gallons will require additional information to justify the need for purchasing a greater capacity.

Applicants must provide a letter from the Regional Solid Waste Planning Board which certifies that the establishment of the used oil collection center is consistent with the Regional Solid Waste Plan. Used oil collection centers may be established at public or private locations; however, first priority will be given to local governments who currently offer no used oil collection services. Second priority will be given to local governments who are establishing a used oil collection center at an existing convenience center location. Local governments siting used oil collection centers on private property are required to have a signed agreement detailing specific terms for use of the site. Grantees will be responsible for contacting and selecting a certified transporter to service their center. Such services must be in place prior to making payments pursuant to the grant.

Applicants must decide whether or not they will accept used oil filters and this information must be included in the application in order to receive funding consideration. The procedures for processing used oil filters are described in the “Used Oil Collection and Recycling Program Policy Guide.” Collection and/or processing of used oil filters requires a permit issued by the Division of Solid Waste Management.

Operation of the attended site must be in compliance with the rules and regulations established by the Division of Solid Waste Management, Chapter 1200-1-11-.11, Standards for the Management of Used Oil.

Grants will only be given to applicants:

- Who accept used, uncontaminated do-it-yourself oil from any person in any one (1) day up to a maximum quantity of five (5) gallons per person, per day (T.C.A. 68-211-1013).
- Who participate in the state toll-free telephone used oil information network system (T.C.A. 68-211-1013).
- Who transfer used oil only to certified transporters (T.C.A. 68-211-1014) and maintain records of all volumes of material collected on an annual basis, including the identity of the hauler and the name and location of the recycling facility to which the oil was transported.

Educational Programs

Each local government who receives a grant to establish a used oil collection center must develop and implement an educational program to encourage the public to dispose of used oil properly.
(T.C.A. 68-211-1003 (3)). The success of any new initiative, such as the establishment of a used oil collection center in a community, depends largely on the emphasis and effort placed on education. Listed below are some suggested objectives to consider in developing an educational program:

- Publicizing the availability of the used oil collection center, location, hours of operation, etc.;
- Educating the residents and potential users of the requirements for participation;
- Providing background information to potential users describing why their participation is important and how their community and the environment will benefit from their efforts; and
- Encouraging the proper handling, disposal and recycling of used oil.

An applicant must submit a narrative with their application which describes their proposed educational program and provide tentative dates for implementation. Applicants must also certify that the educational component proposed is consistent with the Regional Solid Waste Plan. Only local governments are eligible for an educational program grant.

**Equipment That Burns Used Oil for Fuel**

Allowable costs for grants to purchase equipment that burns used oil for fuel will include equipment cost and the cost of a container/tank to collect and store used oil until it is needed for fuel. Priority will be given to local governments that establish a used oil collection center.

Equipment must meet federal regulations (40 CFR 279.24) adopted by the Division of Solid Waste Management. This regulation requires heaters to:

1. Burn only used oil that the owner or operator generates or used oil received from household do-it-yourself used oil generators,
2. Be designed to have a maximum capacity of not more than 0.5 million Btu per hour; and
3. Have combustible gases from the heater vented to the ambient air.

The burning of used oil for fuel is limited to uncontaminated used oil. Federal regulations prohibit the burning of off-specification used oil for energy recovery. Off-specification used oil fuels are those containing more than 5 ppm arsenic, 2 ppm cadmium, 10 ppm chromium, 100 ppm lead, or 4,000 ppm total halogens or those not having a flash point of at least 100 degrees Fahrenheit. The Department will pay for used oil chlorine/halogen detection kits. However, the state does not endorse any specific testing method nor does it attest to the accuracy of any of these testing kits.

An applicant who burns used oil transported from another location and receives more than 55 gallons at any given time, must obtain an identification number and be considered a used-oil transporter. Transporter identification numbers must be obtained from the Division of Solid Waste Management and confirmation of issuance will be required prior to making any payments pursuant to the grant.

Manufacturers' equipment specifications and price quotations must be included with the grant application. Only local governments are eligible for this grant.
Amount of Grant funds Available

The maximum grant amount for the establishment of a used oil collection center is as follows:

--- Storage tank/container (approximately 300 gallons @ $2,200) including minimal site preparation or spill pan purchase (@ $300);

--- Test kits for detecting contaminated oil (@ $6.00 per kit X 25 qty. = $150);

--- Oil filter crushers up to $1,500; and

--- Public Education programs up to $1,500 (covers cost for printing and distributing educational materials).

The maximum grant amount for the purchase of equipment that burns used oil for fuel and a collection/storage containment tank is $6,500. Manufacturers' equipment specifications and price quotes must be included at the time of application. A list of potential vendors for each type of equipment is provided for your convenience and consideration. The Department of Environment and Conservation does not endorse any of these vendors. Funding will be considered for either the price quoted or the grant maximum, whichever is less.

Application

The grant application should be completed and signed by an authorized representative of the local government. Applicants should provide complete information for each grant for which they are applying.

Applications will be funded on a first-come basis to the extent that funds are available. First priority will be given to local governments that currently offer no used oil collection services. Second priority will be given to local governments that are establishing a used oil collection center at an existing convenience center location. Local governments may apply for one or all of the available grants. For-profit and Not-for-profit entities may only apply for a grant to establish a used oil collection center and must include evidence that they have local government concurrence on their grant request.

Submission Date

Applications must be received by the Division of Solid Waste Assistance no later than 4:30 p.m. on May 1, 1994, to access funds in fiscal year 1993-94. No facsimiles (faxed copies) of applications will be accepted. Any applications received after May 1, 1994, will be held for review and approval until after July 1, 1994 and will be considered for funding, based on the availability of funds.

Awards

Approximately sixty (60) days after completion of the application review process, the Department of Environment and Conservation will announce grant awards and commit funds to meet the obligation.

Tennessee Department of Environment and Conservation, Authorization No. 327495, 1,000 copies. This public document was promulgated at a cost of $ .22 per copy. February 1994.
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF SOLID WASTE ASSISTANCE
APPLICATION FOR USED OIL PROGRAM GRANTS

Part I

APPLICANT INFORMATION:

Name of Agency/Organization: ____________________________

Name and telephone number of person to be contacted about the application:

Name: ____________________________

Address: ____________________________

Telephone: ____________________________

FEIN #: ____________________________

Type of Organization:

[ ] County

[ ] Municipality

[ ] Solid Waste Authority

[ ] Planning Region

[ ] For-Profit Organization

[ ] Not-for-Profit Organization

[ ] Other (please specify)

FOR NON PROFIT ORGANIZATIONS:

Chartered in Tennessee? yes [ ] no [ ]

Date of Charter: ____________________________

IRS Classification: ____________________________

Attach a copy of approval letter for Charter or 501(c)(3) exemption

To the best of my knowledge and belief, all data in this application are true and correct. The document has been duly authorized by the governing body of the applicant.

Typed Name of Authorized Representative: ____________________________

Title: ____________________________

Telephone: ____________________________

Signature: ____________________________

Date: ____________________________

For State Use only: ____________________________

Return to: Department of Environment and Conservation

Division of Solid Waste Assistance

L & C Tower, 14th Floor

401 Church Street

Nashville, Tennessee 37243-0455

RDA 2163

DATE RECEIVED BY STATE: ____________________________
Part II:

Provide the information requested for each type of grant for which you are applying. If applying for grant funds to establish a used oil collection center and educational program, complete questions 1 - 10. If you are applying for equipment that burns used oil for fuel, complete questions 11-15.

1. Provide the complete address or site location for the proposed used oil collection center.

________________________________________________________________________

2. Is the proposed site publicly owned (example: city/county owned) or privately owned (example: gas station)? Public_____ Private_____ Name and address of property owner.

________________________________________________________________________

3. If the proposed site is to be located on private property, attach a copy of the signed agreement which details the terms and conditions agreed upon between your agency and the private property owner for the use of the site. Copy Attached______ Not Applicable______

4. Indicate if the proposed site is to be established at an existing convenience center, recycling center, or other publicly owned site.

________________________________________________________________________

5. Briefly describe the physical appearance of the proposed site. (Example: Is the area fenced? Is a concrete slab needed?)

________________________________________________________________________

Identify each site preparation item needed to appropriately place container/tank and establish center. Also provide the estimated costs for each item.

________________________________________________________________________

6. Please list the business hours and days of the week when used oil collection services will be available.

________________________________________________________________________

________________________________________________________________________

7. Has your agency established the maximum amount of uncontaminated used oil to be accepted from any one person in any one day to be five (5) gallons as required in the "Used Oil Collection and Recycling Program Policy Guide"? YES_____ NO_____ If not, explain why.

________________________________________________________________________

If adoption of this policy was done with a formal resolution or similar document, attach a copy to this application. Copy Attached_____ Not Applicable_____
8. Will your used oil collection center accept used oil filters?  YES_____  NO_____
   If yes, indicate which procedures your center will use to deal with the acceptance of used oil filters. (Reference the options for processing used oil filters described in the "Used Oil Collection and Recycling Program Policy Guide." Collection and/or processing of used oil filters requires a permit issued by the Division of Solid Waste Management.)

9. If you are applying for educational funds, attach a narrative report that describes your educational plan, how it will be implemented, and its implementation schedule. (Local Governments ONLY)

10. Describe how the proposed collection center is consistent with the Solid Waste Regional Plan being developed for your county. The applicant must include a letter from the Solid Waste Regional Planning Board to confirm such consistency.

11. Provide the complete address where the equipment will be used.

12. Provide the equipment specifications and price quotes for the space heater to be purchased. (ATTACH COPIES)

13. Will the heater be fueled by used oil generated only at this location?  YES_____  NO_____
   If no, from what site will the additional used oil be transported?

14. If an additional quantity of used oil being transported (quantities in excess of 55 gallons) from another site, has a Used Oil Transporter Identification Number been issued by the Division of Solid Waste Management?  YES_____  NO_____
   If no, application should be made to obtain Used Oil Transporter Identification Number prior to submitting application for grant funds. Confirmation of such ID Number will be required before grant funds will be made available to grantee.

15. Will a collection and storage container/tank be needed at the site where the used oil heater will be used?  YES_____  NO_____
   If yes, include the equipment specifications and price quote for container to be purchased. (ATTACH COPIES)
USED OIL PROGRAM - POTENTIAL VENDOR LIST

The following is a list of potential vendors that sell equipment needed to establish a used oil collection program. It does not represent all of the vendors who may market such equipment; and it is not an endorsement of any vendor listed. This information is provided as a convenience to grant applicants.

POTENTIAL VENDORS FOR
USED OIL COLLECTION/STORAGE CONTAINERS AND TANKS

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Address</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. F. Maier Composites, Inc.</td>
<td>500 East Crystal</td>
<td>(719) 336-8745</td>
</tr>
<tr>
<td>Lamar, Colorado 81052</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fibrex, Inc.</td>
<td>3724 Cook Blvd.</td>
<td>1-800-346-4456</td>
</tr>
<tr>
<td>Chesapeake, VA 23323</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kosmos Recycling Systems &quot;Igloo&quot;</td>
<td>37 Skyline Drive, Suite 4304</td>
<td>(406) 333-0607</td>
</tr>
<tr>
<td>Lake Mary, Florida 32746-6213</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safe-T-Tank Corp.</td>
<td>30 Powers Drive</td>
<td>1-800-536-8910</td>
</tr>
<tr>
<td>Meriden, CT 06451</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WATCO Tanks, Inc.</td>
<td>P. O. Box 369</td>
<td>1-800-879-9282</td>
</tr>
<tr>
<td>La Vernia, Texas 78121</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vital Visions Corp.</td>
<td>Route 1 Box 95</td>
<td>(904) 835-2121</td>
</tr>
<tr>
<td>Freeport, Florida 32439</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

POTENTIAL VENDORS FOR
CONTAMINATION DETECTION KITS

Dexsil Corp.
One Hamden Park Drive
Hamden, CT 06517
(203) 288-3509
POTENTIAL VENDORS FOR OIL FILTER CRUSHERS

Heath Corp.
P. O. Box 72
Lake Wales, Florida 33859-0072
(813) 638-1819

Crush-A-Matic
2805 Urbandale Lane, North
Minneapolis, MN 55447
1-800-477-7617

MBI, Inc.
20129 Meadow Lake Road
Snohomish, WA 98290
(206) 794-9123

G A Morris Enterprises
2393 Teller Road, #108
Newbury Park, CA 91320
(805) 499-0171

Custom Compactors Corp.
8100 East Broadway
Tampa, Florida 33619
1-800-223-4741

Lubrication Equipment Service
808 East Magnolia Avenue
Knoxville, TN 37917
(615) 525-8401

Authorized Equipment Services
812 Polk Avenue
Memphis, TN 38104
(901) 774-0850

Mid-South Hydraulic & Equipment
319 S. Sommerville
Memphis, TN 38104
(901) 526-3114

Interstate Marketing Corp.
104 Spence Lane
Nashville, TN 37210
(615) 254-0303

Fluid Power, Inc.
460 Metroplex, Suite 112
Nashville, TN 37211
1-800-264-3391

Magnum Force/Gardner Equipment
P. O. Box 196
Juneau, WI 53039
(414) 366-4880

Huth Manufacturing Corp.
225 North Michigan Avenue
Chicago, Illinois 60601
(312) 565-7500

John Dow Industries, Inc.
120 East Tascarawas Avenue
Barberton, Ohio 44203
(216) 753-6935

Jobbers Equipment Whse.
5440 NW 78th Avenue
Miami, Florida 33166
1-800-274-9730

Hills, Inc.
7765 Ellis Road
W. Melbourne, Florida 32904
(407) 724-2370

Odyssey Manufacturing, Inc.
4249 Blue Star Hwy.
Holland, MI 49423
(616) 392-8833

OBERG International, Inc.
6120 - 195th Street, N.E.
Arlington, WA 98223-7714
(206) 435-6100

J.V. Manufacturing, Inc.
P. O. Box 229
Springdale, Arkansas 72765-0229
1-800-678-7320

Johnson & White Equipment Service, Inc.
1104 Fourth Avenue, South
Nashville, TN 37210
(615) 256-0443

Mighty Mike, Inc.
3907 S. W. 12th Court
Ft. Lauderdale, Florida 33312
(305) 583-2504
CONTINUATION OF POTENTIAL VENDORS FOR OIL FILTER CRUSHERS

SHRCO, Inc.
414 Main Street
Caldwell, ID 83605
(208)454-0066

Independent Distributing - OTC
401 3rd Avenue, S.E.
Austin, MN 55912
1-800-727-WARM

United Recyclers, Inc.
17 Bon Aire Circle
Suffern, New York 10901-7008
1-800-232-7005

Lincoln, Inc
One Lincoln Way
St. Louis, MO. 63120
(314) 679-4300

POTENTIAL VENDORS FOR EQUIPMENT THAT BURNS USED OIL FOR FUEL

Black Gold, Inc.
Great Circle Road, #344
Nashville, TN 37228-1707
1-800-351-0643
(615) 251-0680

Jet-A-Way (Shenandoah Distributor)
P. O. Box 485
Louisville, TN 37777
1-800-367-6485

Alvin's Auto Equipment, Inc.
1500 - 2nd Avenue, North
Nashville, TN 37208-1710
1-800-654-7543
(615) 255-4872

Parkham Industrial Distributors, Inc.
10013 Old Brownsville Road
Louisville, KY 40241
(502) 426-9995

Fornax, Inc.
P. O. Box 65
Sanford, ME 04073
1-800-639-2077

ASE Corp. / Wastebusters
P. O. Box 174
Hopkinton, MA 01748
1-800-288-6594

Sunfire of New England
290 Smith Street
Providence, RI 02908
1-800-556-6496

Arrow Equipment, Inc./Clean Burn
Mount Eustis Road
Littleton, NH 03551
(603) 444-3313

M. R. Enterprises, Inc.
P. O. Box 15349
Asheville, NC 28813
(704) 274-5222

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Hearing impaired citizens may use the Tennessee Relay Service (1-800-848-0299).

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Chapter 11
Implementation: Schedule, Staffing, and Funding

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Chapter 11
Implementation: Schedule, Staffing, and Funding

System Definition
1. Region's Components and Structure

2. Region's Goals, Objectives, and Strategy
   a. Goals
      1. It is the goal of the Houston County Municipal Solid Waste Planning Region to make the region's citizens, commercial businesses, industries, and institutions active, participating partners in the reduction, reuse, recycling, collection, management, and disposal of the region's solid waste.
      2. It is the goal of the Houston County Municipal Solid Waste Planning Region to reduce, reuse and/or recycle as much of the Region's waste as practical.
      3. It is the goal of the Houston County Municipal Solid Waste Planning Region to dispose of the remaining solid waste in an environmentally safe manner as inexpensively as possible, considering all factors.
      4. It is the goal of the Houston County Municipal Solid Waste Planning Region to continue to provide a clean, well maintained, attended convenience center to its residents.
   b. Objectives
      1. It is the objective of the Houston County Municipal Solid Waste Planning Region to present information concerning our goals to the citizens of the Region.
      2. It is the objective of the Houston County Municipal Solid Waste Planning Region to educate both adults and children to the importance of solid waste reduction, reuse, recycling, and the environmental safe disposal of the remaining solid waste.
      3. It is the objective of the Houston County Municipal Solid Waste Region to assist our industries, commercial business, and institutions to reduce, reuse, and/or recycle their wastes as much as practical.
      4. It is the objective of the Houston County Municipal Solid Waste Region to inform the tax payers in the Region of the costs of solid waste collection, transportation, and disposal.
c. Strategy

The Region will achieve its goals and objectives by launching and maintaining an effective education system to obtain the voluntary social action of our citizens. We will also operate our recycling and collection services in a cost effective, market and customer responsive manner. We will also secure the least expensive, but environmentally sound, method of disposal of our remaining wastes.

3. Projected Solid Waste Generation to be Collected and Managed

Table 11-1
Solid Waste To Be Collected & Managed After 25% Reduction, Tons/Yr*

<table>
<thead>
<tr>
<th>Year</th>
<th>Houston Co.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>4270</td>
</tr>
<tr>
<td>1995</td>
<td>3891</td>
</tr>
<tr>
<td>1996</td>
<td>3897</td>
</tr>
<tr>
<td>1997</td>
<td>3904</td>
</tr>
<tr>
<td>1998</td>
<td>3911</td>
</tr>
<tr>
<td>1999</td>
<td>3917</td>
</tr>
<tr>
<td>2000</td>
<td>3924</td>
</tr>
<tr>
<td>2001</td>
<td>3927</td>
</tr>
<tr>
<td>2002</td>
<td>3931</td>
</tr>
<tr>
<td>2003</td>
<td>3936</td>
</tr>
</tbody>
</table>

*From Table 3-4

4. Proportional Flow Diagram

Figure 11-1 shows a proportional flow diagram.

5. Composite Map

Figure 11-2 shows a composite map of the Regional Solid Waste System as planned.
6. Institutional Structure for Plan Implementation

Houston County will establish a citizen advisory board. This board will advise the Regional to serve as a liaison between the public and the Region. The County Commission and County Executive currently has the authority and responsibility for all solid waste matters. If, in the future, a solid waste authority has formed, the authority will assume most of the responsibilities for implementing this plan. However, there appears to be no reason for Houston County to form a Solid Waste Authority at this time. The County Executive and County Commission will be responsible for implementing this plan.

Citizen Advisory Committee

The regional solid waste committee currently consists of several elected officials and several non-elected citizens who are volunteering their time. Houston County has a small population. There are nine (9) people on the planning committee. Thus the planning committee represents a broad cross section of the population and should serve as the same purpose as a citizen advisory committee. Therefore, a separate citizen advisory committee is not needed in Houston County.

Implementation Schedule and Milestones

1. State Deadlines
   March 19, 1994  Certification of landfill operators must be implemented
   June 30, 1994  Solid waste regional plans are due
   December 31, 1994  Whole waste tires will no longer be accepted for land filling
   January 1, 1994  Site to accept and store whole waste tires, used automotive fluids/oils, and lead-acid batteries must be established
   January 1, 1995  Solid waste collection and disposal system must be available in each county
   December 31, 1995  Requirements for 25% waste reduction becomes effective
   January 1, 1996  Collection sites for recyclable materials must be established
   June 30, 1996  Tipping fee surcharge expires

2. Regional Implementation Schedules and Milestones
   a. Years 1994 to 1998
      July 1, 1994
      1) Appoint recycle/reduction education coordinator for each county.
      2) Prepare educational program to begin in Fall, 1994 (see Chapter 9).


Table 11-2
Implementation Schedule
Houston County, Tennessee

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit ten (10) year plan</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appoint recycling/reduction/education coordinator for county</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational program</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Collection of household hazardous wastes</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Commercial/institutional/industrial waste reduction</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish speaker’s bureau</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish recycling center</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish tire storage, used fluids, battery storage site</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3) Begin preparation for advertisement of collection of household hazardous waste (see Chapter 10).

4) Begin program of contacting industries regarding waste separation and reduction, coordinate with the University of Tennessee.

December 1, 1994
1) Submit Ten (10) Year Plan
2) Establish waste tire storage, used automotive fluids/oils, and lead-acid batteries storage site.
3) Establish the required number of convenience centers in each county or establish door-to-door collection.
4) Establish Speaker's Bureau.

July 1, 1995
1) Establish a recycling center in the county.
2) Determine if waste reduction goal of previous year was met.

July 1, 1996
1) Determine if waste reduction goal of previous year was met.

July 1, 1997
1) Determine if waste reduction goal of previous year was met.

July 1, 1998
1) Determine if waste reduction goal of previous year was met.

b. Years 1999 to 2003

July 1, 1999 - July 1, 2003
1) Determine if waste reduction goal of previous year met.
STAFFING AND TRAINING REQUIREMENTS

1. Management Positions
   
a. Recycling/Reduction/Education Coordinator

   The county should appoint a Recycling/Reduction Education Coordinator. This can be either a paid or a volunteer position. The coordinator may operate with or without a staff. The coordinator’s duties should include:
   
   - Publicity of the location and operating hours of the recycling drop off point.
   - Education of the advantages and requirements of recycling. Only recyclable should be placed in the recycling containers.
   - Working with the local industries, commercial establishments, and institutions on solid waste reduction. This will include coordination with the programs offered by the University of Tennessee.
   - Working with the schools and other groups to encourage recycling contests.
   - Determining markets for the recycled materials. This will include coordination with the State’s Office of Cooperative Marketing For Recyclable.
   - Assist with preparing annual budgets.

   This person should be a “people” person. They will need to be able to communicate and present programs to an entire range of populace. They will be expected to present a recycling program to a kindergarten class in the morning, speak to a group of business leaders at lunch, and drive home a hard bargain for the sale of recyclable in the in the afternoon. Most of all, they to believe in recycling and reduction and be enthusiastic.

   Ideally, their training will be primarily in public speaking and they should be able to have some dealings with math and financial matters.

B. Solid Waste Manager

   Houston County should have a solid waste manager to be responsible for all aspects of the county’s solid waste and supervise the recycling/reduction coordinator, collection manager, and landfill operator.

2. Currently Authorized Solid Waste Management Positions
   
a. Houston County

   Houston County currently authorizes a solid waste manager position as well as several convenience center attendants. The director and attendants work under the supervision of the county executive.

3. Projected Additional Staff Requirements

   No additional staff will be required at this time.
Houston County Solid Waste Planning Region
Ten Year Solid Waste Plan
November 1994

Table 11-3
Houston County

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Houston County</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solid Waste Manager</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convenience Center Attendants</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>

* Existing
✓ Additional

FUNDING

There are several funding options to meet the estimated costs as shown on Table 11-3.

The following is a suggested funding alternative. Houston County can modify this alternative as desired. It is assumed no grants will be received. The expense of operating a convenience center (and its associated landfill fees), providing a recycling center, education program, used tire storage site, waste oil storage site, and a household hazardous waste program will be funded by the existing method. That is, each City and Houston County will fund the system through the general funds. Any grants received will help lower the cost.

The budget for this fiscal year is presented as Table 2-6. Adjustments will be made as necessary to provide sufficient funding.
The county (and authority if an authority is formed) must keep an accurate record of all costs and revenues associated with disposal. Accurate records should also be kept of all costs and revenues associated with collection. Enterprise funds must be established not later than July 1, 1994.

Grants

At this time, State grants are available (or are to become available) for such activities as:

- Matching grant assistance to establish or upgrade convenience centers (TCA § 68-211-824)
- Recycling collection site equipment (TCA § 68-211-825)
- Collection of household hazardous waste (TCA § 68-211-828)
- Grants to implement education programs (TCA § 682-211-847)
- Litter grant

Since many grants are awarded on a competitive basis, and since all grants are subject to availability of funds, the following budgets assume no grant funds.

FEES

Tipping fees and collection fees can be set and collected; however, the revenues can only be used for solid waste management purposes; they cannot be diverted to other uses. The host county of a solid waste disposal facility may impose a host county fee or surcharge, but it can only be used to offset “costs incurred and other impacts resulting from the county being host to the solid waste disposal facility or incinerator.” Municipalities can share in host county fees if appropriate. Fees can also be collected to offset collection costs including convenience centers. These fees can be collected through an electric utility, subject to the agreement of the electric utility. The following is a copy of several sections of the Solid Waste Act of 1991.

§ 68-211-835. Tipping Fee - Amount - Collection - Expenditure of revenues - Joint ventures - Surcharges - Solid waste disposal fees - Collection. - (a) Effective July 1, 1991; each county, municipality, or solid waste authority which owns a municipal solid waste disposal facility or incinerator may impose a tipping fee upon each ton of municipal solid waste or its volume equivalent received at such solid waste disposal facility or incinerator. Such a tipping fee shall be set by the governing body of the county or municipality, or by the board of directors of the solid waste authority. This tipping fee shall be collected by the operator of the publicly owned municipal solid waste disposal facility or incinerator and remitted to the owner. The fee imposed may be equal to, or a portion, or, the estimated cost of providing solid waste management services on a per ton or volume equivalent. By July 1, 1993, such full cost shall be determined pursuant to the uniform solid waste accounting system developed by the controller of the treasury.
(b) Revenue from tipping fees at publicly owned solid waste disposal facilities and incinerators received by counties, municipalities and solid waste authorities shall be expended only for solid waste management purposes.

(c) When a municipal solid waste disposal facility is operated as a joint venture by more than one (1) city or county, or combination thereof, or by an authority, the tipping fee authorized under this section shall be imposed by the joint operators or authority, and the tipping fee received shall be remitted to the participating local governments or authorities for expenditure for solid waste management purposes only.

(d) In addition to any tipping fee imposed by any local government under this section, there shall also be imposed a surcharge of eighty-five cents per ton on each ton of municipal solid waste received at all solid waste disposal facilities or incinerator will collect this surcharge and remit it to the state treasury to be paid into the solid waste management fund. The surcharge imposed by this subsection shall expire on June 30, 1993.

(e) In order to encourage regional use of solid waste disposal facilities or incinerators, a county that is host to a solid waste disposal facility or incinerator used by other counties in the same region formed pursuant to this part may impose a surcharge on municipal solid waste received at any such solid waste disposal facility or incinerator by resolution of its county legislative bodies in the region. The surcharge shall be imposed on each ton or volume equivalent of municipal solid waste so received. The revenue received by a county from the surcharge authorized by this subsection shall be expended for solid waste management purposes or for purposes related to offsetting costs incurred and other impacts resulting from the county being host to the solid waste disposal facility or incinerator. If any municipality in the host county incurs costs as a result of such a municipal solid waste facility or incinerator, then the county shall appropriate funds derived from the surcharge revenue to the municipality which shall be used by the municipality to offset such costs.

(f) (1) In addition to any fee authorized by Title 5, and to any tipping fee imposed by any local government under this section, a county, municipality or solid waste authority is authorized to impose:

(A) A surcharge on each ton of municipal solid waste received at a solid waste disposal facility or incinerator for expenditure for solid waste collection or disposal purposes consistent with this part; and/or

(B) A solid waste disposal fee authorized by subsection (g).

(2) The surcharge authorized to be imposed by a county by subdivision (f)(1)(A) shall not take effect until a regional solid waste plan is approved for such county.
(g) (1) In addition to any power authorized by Title 5, a county, municipality or solid waste authority is authorized to impose and collect a solid waste disposal fee. Funds generated from such fees may only be used to establish and maintain solid waste collection and disposal services, including, but not limited to, convenience centers. All residents of the county shall have access to these services. The amount of the fee shall bear a reasonable relationship to the cost of providing the solid waste disposal services. Such fees shall be segregated from the general fund and shall be used only for the purposes for which they were collected.

(2) Subject to any other requirement of law, a county, municipality or solid waste authority may enter into an agreement with an electric utility to collect the solid waste disposal fee as a part of the utility’s billing process. The agreement shall be approved by the governing body of the county or municipality entering into the agreement, or, in the case of a solid waste authority, the agreement shall be approved by the authority’s board of directors.

(3) A solid waste disposal fee shall not be imposed on any generator of solid waste when the generator’s solid waste is managed in a privately owned solid waste disposal system or resource recovery facility owned by the generator. [Acts 1991, ch. 451, § 54; T.C.A. §68-31-835.]
SOLID WASTE MANAGEMENT ACT OF 1991

MANAGING OUR WASTE:
SCHEDULE OF GRANTS

The following grants are authorized in the law, to be paid from the Solid Waste Management Fund, as money becomes available.

GRANTS TO COUNTIES, CITIES AND AUTHORITIES

Year 1 (July, 1991 - June, 1992)

Grants for purchase of recycling equipment .................. up to $20,000(a)
Rebates for recycling to urban counties/cities .............. $(varies)(b)
Grants for construction of tire storage sites .............. up to $5,000

(a) Competitive grants; assuming a maximum award of $20,000/year, available to counties, cities or qualified nonprofit organizations.

(b) $600,000 annually is available as rebates to the 11 urban counties for their local recycling programs. This rebate amount is shared between cities and counties, according to population. The counties are: Shelby, Davidson, Knox, Hamilton, Rutherford, Madison, Sullivan, Montgomery, Washington, Sumner, and Blount.

Year 2 (July, 1992 - June, 1993)

Grants for purchase of truck scales .................. up to $34,000(c)
Grants for purchase of recycling equipment .............. up to $20,000(a)
Rebates for recycling to urban counties/cities .......... $(varies)(b)
Grants for development of regional plan ................ $15,000-$20,000(6)

(c) Available to counties, cities, or authorities which continue to operate a landfill after March 18, 1994.

(d) Available to counties or planning regions. The amount of the planning grant depends on the size of the planning region: $15,000 to a county that opts to plan alone; $17,500 to a county that joins a two-county region; and $20,000 to a county that joins a three or more county region.

Year 3-5 (July, 1993 - June, 1996)

Grants for purchase of recycling equipment ................ up to $20,000(a)
Rebates for recycling to urban counties/cities .............. $(varies)(b)
Grants for cleanup of scrap tires/storage sites .......... up to $10,000(c)
Grants for development of collection system .............. $10,000-$20,000(c)
(convenience centers or higher levels of service)
Grants for implementation of educational plans .......... $7,500(c)

(e) Available to counties only; up to $10,000/country (if had not previously received the $5,000 grant).
Available to counties that provide or wish to provide collection systems. Amount of match required (either 10% or 20%) will depend on an economic index. Grants would be limited to $10,000 per convenience center to fund an average of up to five (5) convenience centers per county.

Assume an average grant of $7,500/year.

Year 2-5 (July, 1992 - June, 1996) (Major Cities Only)

Grant for development of a permanent household hazardous waste collection site up to $500,000 per year

Available only to the cities of Chattanooga, Knoxville, Memphis and Nashville for development of a permanent household hazardous waste collection and packaging site. Funds totaling $1,000,000 are available for FY 1993 and $500,000 for each year thereafter.

GRANTS TO DEVELOPMENT DISTRICTS

Year 1 (July, 1991 - June, 1992)

Grant for preparation of district assessment $75,000

Years 2-5 (July, 1992 - June, 1996)

Grant for maintaining data base and coordinating local planning. DD determines funding option $37,500/yr. for 4 yrs., or $50,000/yr. for 3 yrs.

FOR MORE INFORMATION:
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Department of Environment and Conservation
Division of Solid Waste Assistance
14th Floor, L & C Tower, 401 Church Street
Nashville, TN 37243-0455
(615) 532-0091

Joyce Dunlap, Manager (Grants)
Department of Environment & Conservation
Division of Solid Waste Assistance
14th Floor, L & C Tower, 401 Church Street
Nashville, TN 37243-0455
(615) 532-0075

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This public document, Authorization No. 327470, was promulgated at a cost of $.03 per copy. October 1993.
Selected Portions
of the
Solid Waste Authority Act of 1991
From available funds in the solid waste management fund established by 68-211-821, the department may award annual grants to the University of Tennessee county technical assistance service, the University of Tennessee municipal technical advisory service, the development districts and the department of economic and community development's division of local planning. Upon receiving such grant funds, these agencies shall render technical assistance to regions, counties and municipalities as needed in the development of the plan required by this part.

68-211-823. Initial planning grants - Annual plan maintenance grants - Planning assistance grants.

From available funds in the solid waste management fund established in 68-211-821, the department shall award:

1. Initial planning grants to development districts in order to assist such districts in developing the initial district needs assessment;

2. Annual plan maintenance grants to development districts in order to assist such districts in revising data, maintaining district needs assessments, and assisting counties within the district; and

3. Planning assistance grants to each county or solid waste region in order to assist such counties or regions in developing, revising and maintaining regional plans required by 68-211-814.

68-211-824. Matching grant assistance to establish or upgrade convenience centers.

From funds available in the solid waste management fund established by 68-211-821, the department shall offer matching grant assistance to counties for the purpose of establishing or upgrading convenience centers required by 68-211-851. Such grant funds may be applied to expenses for land, paving, fencing, shelters for attendants, containers and basic equipment including, but not limited to, balers, crushers, grinders and fencing. Such funds may also be applied to expenditures for developing and printing of operating manuals, but such funds may not be used for regular operating expenses of a recurring nature. The local share of the match shall be determined by the department, using an economic index promulgated by the board based upon factors which include, but are not limited to, per capita income and property values of the county applicant. Counties falling within the lower one half (1/2) of the economic scale on the index shall be eligible for lower matching rates. The board shall promulgate regulations regarding the appropriate index and matching rates.

(c) 1956-1993 By The State Of Tennessee & The Michie Company
68-211-825. Grant program - Recycling collection site equipment - State surcharge on tipping fee - Rebate.

(a) From funds available from the solid waste management fund, the department shall establish a grant program for the purchase of equipment needed to establish or upgrade recycling at a public or not-for-profit recycling collection site. Such equipment may include, but is not limited to, containers, balers, crushers and grinders.

(b) For the eleven (11) counties which generate the greatest amount of solid waste as recorded in the University of Tennessee's solid waste management report of February 1991 to the state planning office, under a technical assistance contract pursuant to part 6 of this chapter, or as subsequently modified by data provided by subsequent annual reports required by 68-211-871, the state shall grant a rebate against the amount due to the state under the state surcharge on the tipping fee imposed by this part. The state will rebate the amount of a county's credit to the county on an annual basis. The total amount of credits shall not exceed an amount equal to one hundred fifty percent (150%) of the funds allocated for recycling equipment grants. The rebate for any one (1) of the eleven (11) counties shall be determined pursuant to the following formula:

\[
\text{Rebate} = \frac{\text{tons of the county's solid waste}}{\text{total tons of solid waste collected from all eleven (11) counties}} \times 150\% \text{ of state funds allocated for recycling grants}
\]

Such rebate shall be in lieu of recycling equipment grants for these eleven (11) counties. Within a county, the rebate shall be allocated proportionately by population among the municipalities in the county which provide collection or disposal services and the county for the remaining population of the county. A county or municipality may only expend such rebate for recycling purposes.

68-211-826. Office of cooperative marketing for recyclables -

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Duties.

(a) From funds available from the solid waste management fund, by July 1, 1992, the department of economic and community development shall establish an office of cooperative marketing for recyclables.

(b) The duties of the office of cooperative marketing for recyclables include:

1. Preparing and maintaining a directory of regional buyers, which shall include current information on product specifications, markets and price ranges;

2. Preparing and maintaining a directory of public and private, for profit and nonprofit recycling programs;

3. Collecting information on the quantity and quality of materials offered for sale by recycling programs;

4. Assisting counties in contract negotiation;

5. Creating a data base for and operating an interactive information clearinghouse and marketing service, which shall include pricing information; and

6. Maintaining an inventory of available quantities, qualities and locations of recyclable materials in Tennessee, and marketing such sites to industries which can utilize available materials.

68-211-827. Recycling market advisory council.

From funds available in the solid waste management fund established by 68-211-821, the commissioner of economic and community development shall appoint and convene a recycling market advisory council to assist the department of economic and community development in identifying markets and to advise the department on the expansion of markets for recyclables. Such council shall include representatives from the for-profit recycling business sector, nonprofit recycling sector, nonprofit or volunteer environmental organizations, and the manufacturing sector.

68-211-828. Competitive grants for collection of household hazardous waste.

From funds available from the solid waste management fund, the department shall award competitive grants for collection of household hazardous waste at a permanent site to municipalities with a population of one hundred thousand (100,000) or more in counties with a population of two hundred eighty-seven thousand seven hundred (287,700) or more according to the 1980 federal census or any subsequent federal census. One (1) such grant shall be awarded competitively during fiscal year 1992-1993, and each of the next three (3) successive fiscal years. An eligible municipality may only receive one (1) grant.

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68-211-829. Household hazardous wastes - Mobile collection units.

From funds available from the solid waste management fund, the department shall provide, directly or by contract, mobile collection units to provide collection of household hazardous wastes on designated days in each county. Each county or solid waste authority, if created, shall provide a service site and shall advertise in newspapers of general circulation in the county the day(s) and hours and location where the household hazardous wastes will be collected by the mobile unit. The advertisements shall also identify examples of household hazardous wastes that the mobile unit will receive. The county or solid waste authority shall also furnish at least one (1) person to represent the county or solid waste authority at the service site on the days of collection, who will assist the persons operating the mobile collection unit.

68-211-830 - 68-211-834. [Reserved.]


(a) Effective July 1, 1991, each county, municipality, or solid waste authority which owns a municipal solid waste disposal facility or incinerator may impose a tipping fee upon each ton of municipal solid waste or its volume equivalent received at such solid waste disposal facility or incinerator. Such a tipping fee shall be set by the governing body of the county or municipality, or by the board of directors of the solid waste authority. This tipping fee shall be collected by the operator of the publicly owned municipal solid waste disposal facility or incinerator and remitted to the owner. The fee imposed may be equal to, or a portion of, the estimated cost of providing solid waste management services on a per ton or volume equivalent. By July 1, 1993, such full cost shall be determined pursuant to the uniform solid waste accounting system developed by the comptroller of the treasury.

(b) Revenue from tipping fees at publicly owned solid waste disposal facilities and incinerators received by counties, municipalities and solid waste authorities shall be expended only for solid waste management purposes.

(c) When a municipal solid waste disposal facility is operated as a joint venture by more than one (1) city or county, or combination thereof, or by an authority, the tipping fee authorized under this section shall be imposed by the joint operators or authority, and the tipping fee received shall be remitted to the participating local governments or authorities.

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for expenditure for solid waste management purposes only.

(d) In addition to any tipping fee imposed by any local government under this section, there shall also be imposed a surcharge of eighty-five cents (85) per ton on each ton of municipal solid waste received at all solid waste disposal facilities or incinerators. The operator of the municipal solid waste disposal facility or incinerator will collect this surcharge and remit it to the state treasury to be paid into the solid waste management fund. The surcharge imposed by this subsection shall expire on June 30, 1996.

(e) In order to encourage regional use of solid waste disposal facilities or incinerators, a county that is host to a solid waste disposal facility or incinerator used by other counties in the same region formed pursuant to this part may impose a surcharge on municipal solid waste received at any such solid waste disposal facility or incinerator by resolution of its county legislative bodies in the region. The surcharge shall be imposed on each ton or volume equivalent of municipal solid waste so received. The revenue received by a county from the surcharge authorized by this subsection shall be expended for solid waste management purposes or for purposes related to offsetting costs incurred and other impacts resulting from the county being host to the solid waste disposal facility or incinerator. If any municipality in the host county incurs costs as a result of such a municipal solid waste facility or incinerator, then the county shall appropriate funds derived from the surcharge revenue to the municipality which shall be used by the municipality to offset such costs.

(f) (1) In addition to any fee authorized by title 5, and to any tipping fee imposed by any local government under this section, a county, municipality or solid waste authority is authorized to impose:

(A) A surcharge on each ton of municipal solid waste received at a solid waste disposal facility or incinerator for expenditure for solid waste collection or disposal purposes consistent with this part; and/or

(B) A solid waste disposal fee authorized by subsection (g).

(2) The surcharge authorized to be imposed by a county by subdivision (f)(1)(A) shall not take effect until a regional solid waste plan is approved for such county.

(g) (1) In addition to any power authorized by title 5, a county, municipality or solid waste authority is authorized to impose and collect a solid waste disposal fee. Funds generated from such fees may only be used to establish and maintain solid waste collection and disposal services, including, but not limited to, convenience centers. All residents of the county shall have access to these services. The amount of the fee shall bear a reasonable relationship to the cost of providing the solid waste disposal services. Such fees shall be segregated from the
general fund and shall be used only for the purposes for which they were collected.

(2) Subject to any other requirement of law, a county, municipality or solid waste authority may enter into an agreement with an electric utility to collect the solid waste disposal fee as a part of the utility's billing process. The agreement shall be approved by the governing body of the county or municipality entering into the agreement, or, in the case of a solid waste authority, the agreement shall be approved by the authority's board of directors.

(3) A solid waste disposal fee shall not be imposed on any generator of solid waste when the generator's solid waste is managed in a privately owned solid waste disposal system or resource recovery facility owned by the generator.

68-211-836 - 68-211-840. [Reserved.]

68-211-841. Tennessee municipal solid waste advisory committee.

(a) There is hereby established the Tennessee municipal solid waste advisory committee to advise the state planning office concerning solid waste management. The committee shall have ten (10) members appointed by the director of the state planning office, at least one (1) of whom is a female, and shall consist of:

(1) One (1) member representing a statewide organization of business interests;
(2) One (1) member representing a statewide organization for environmental concerns;
(3) One (1) member representing the waste management industry;
(4) One (1) member representing the recycling industry;
(5) One (1) member representing the public from each of the three (3) grand divisions of the state;
(6) One (1) member representing development districts;
(7) One (1) member representing municipalities; and
(8) One (1) member representing counties.

(b) The director of the state planning office shall appoint members of the committee in consultation with statewide organizations representing the various interests on the committee.

(c) The members shall elect a chair from among the members, and a majority of members shall constitute a quorum.

68-211-842. Education program - Guidelines.

The state planning office shall issue guidelines for the education program element of the municipal solid waste region plan. Each solid waste regional plan shall include an education plan.
program to assist adults and children to understand solid waste issues, management options and costs, and the value of waste reduction and recycling.

68-211-843. Information clearinghouse - Regional workshops and conferences.

The state planning office shall establish an information clearinghouse to acquire, review, evaluate and distribute a catalog of materials on source reduction and recycling. The state planning office shall also organize and conduct statewide and regional workshops and conferences on solid waste management, source reduction and recycling.

68-211-844. Educational and training programs.

The state planning office shall collect, prepare and disseminate information and conduct educational and training programs designed to assist in the implementation of solid waste management programs and inform the public of the relationship between an individual's consumption of goods and services and the generation of different types and quantities of solid waste. The state planning office, in consultation with the department of education, shall prepare the information and programs on a statewide basis for the following groups:

(1) Municipal, county and state officials and employees;
(2) Kindergarten through graduate students and teachers;
(3) Businesses that use or could use recycled materials or that produce or could produce projects from recycled materials, and persons who provide support services to those businesses; and
(4) The general public.

68-211-845. Promotion of education concerning solid waste management.

In order to promote education of children in grades kindergarten through twelve (K-12) concerning solid waste management, source reduction and recycling, the department of education, in conjunction with the state planning office, shall:

(1) Review, evaluate and publish a list of approved curriculum materials relative to solid waste management, source reduction and recycling;
(2) Sponsor workshops on the curriculum materials for educators;
(3) Provide in-service training for teachers on solid waste management, recycling and source reduction, environmental protection and conservation of materials; and
(4) Establish peer assistance programs for teachers within a solid waste management region.

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68-211-846. Education programs - Awards.

The state planning office shall establish an awards program for outstanding school-based solid waste, source reduction or recycling education programs.

68-211-847. Grants to implement education programs.

After a region or county's plan is approved, the department shall award grants for implementing the education program component of the plan from funds available in the solid waste management fund.

68-211-848. Recognition of university and college programs - Awards program.

The state planning office shall develop an awards program for recognition of university and college programs concerning waste management, source reduction and recycling.

68-211-849, 68-211-850. [Reserved.]

68-211-851. Municipal solid waste collection and disposal systems - Convenience centers - Technical assistance.

(a) Effective January 1, 1995, each county shall assure that one (1) or more municipal solid waste collection and disposal systems are available to meet the needs of the residents of the county. Such systems shall complement and supplement those provided by any municipality. The minimum level of service that the county shall assure is a system consisting of a network of convenience centers throughout the county. Unless a higher level of service, such as household garbage pickup, is available to the residents, a county shall provide directly, by contract, or through a solid waste authority, convenience centers which shall meet minimum design standards to be developed by the department and established by regulation. The department, in consultation with the state planning office, shall also develop regulations to be promulgated by the board for determining the minimum requirements for and number of convenience centers or other forms of collection that a county shall maintain. Such regulations shall consider county population, area, distances to possible convenience center sites, and staffing requirements.

(b) As part of the local plan required by 68-211-814, 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.

(c) If requested, the University of Tennessee county
Chapter 12
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Chapter 12

Allocation of Implementation Responsibilities:
Plan Adoption and Submission

Specific Responsibilities per County and Municipally

Houston County has a City-County form of government. Houston County is responsible for all solid waste matters.

Adoption

1. Regional Planning Committee

   The Houston County Municipal Solid Waste Planning Committee adopted this Ten (10) year Plan on November 17, 1994.

2. Houston County Commission

Local Planning Commission Review

1. Regional Planning Commission

   There is not a regional planning commission.

2. Houston County

   Houston County does not have a planning commission.

Forming an Authority

There is no apparent reason for Houston County to form a solid waste authority at this time. However, if Houston County decides to form an authority, the Solid Waste Act of 1991 gives a procedure to follow if an authority is to be created. An authority would be created by actions of the county commission. It would consist of representatives from county, have the power to enter into contracts, sell bonds, and bill the solid waste customers.

Following is a copy of the section of the Solid Waste Act of 1991 that deals with solid waste authorities. Forming an authority has its advantages and disadvantages. The disadvantage is that the county commission would give up some of the power that it now exercises. This disadvantage is not irreversible in that a county in an authority could dissolve. The advantages of an authority lie primarily in the fact that the authority would be one step removed from potential pressure when making difficult and/or potentially unpopular decisions.

An authority can be formed at any time, even before the regional 10-year plan is prepared.

Table 12-1 gives the steps to form a solid waste authority.

At the end of this section are selected portions of the Act dealing with solid waste authorities.
Table 12-1  
Forming a Solid Waste Authority

1. Develop a resolution to be adopted by participating counties and cities [§ 68-211-903.(a)].
   a. The resolution must include a name for the Authority [§ 68-211-903.(a)].
   b. The resolution must provide for a Board of Directors (Board). The number of members shall be odd and shall be between 5 and 15. Each participating entity shall have at least one Board member [§ 68-211-904.(a)].
   c. Board members can, but need not, be members of the county or municipal governing bodies, county executives, mayors, county or municipal officials or department heads [§ 68-211-904.(b)].
   d. The resolution must specify if compensation will be provided to the Board members [§ 68-211-904.(c)].
   e. Compensation may be set up such that the members mentioned in c, above, receive no compensation except reimbursement of actual expenses [§ 6868-211-904.(c)].

2. Provide for public comment on the resolution [§ 68-211-904.(c)].

3. All parties adopt the resolution [§ 68-211-903.(a)].

4. Adopted resolution shall be certified to the Secretary of State by participating county court clerks, city clerks or recorders [§ 68-211-903.(a)].

5. The Board is appointed in the number and content outlined in the creating resolution by the County Executives and Mayors and approved by their respective governing bodies [§ 68-211-904.(a)]. Initially, 1/3 for 6 year terms so that the Board members terms are staggered. After the initial appointments, all terms will be 6 year [§ 68-211-904.(a)].

6. The Board meets and organizes as a Board. Elect one person Chairperson, one person Vice-chairperson, one person Secretary and one person Treasurer. One person may hold both Secretary and Treasurer positions [§ 68-211-905.(a)].

7. After organization, Board shall function and have powers as outlined in § 68-211-905 through § 68-211-924.

Note: Reference are to the Solid Waste Act of 1991.
Selected Portions of the Solid Waste Authority Act of 1991
and recovery of recyclable materials from the solid waste stream, including facilities or systems for the storage, conversion or transportation thereof;

(8) "Revenue" means all rents, fees and other charges received by the authority for use of its projects, facilities and services including, without limitation, all amounts received for the collection, transportation, disposal or processing of solid waste, the operation of any project, or the sale, storage, distribution or transportation of energy, energy producing materials or other materials or commodities by the authority;

(9) "Solid waste" means solid waste as defined in 68-211-103(7);

(10) "Solid waste disposal facility" means land, rights in land, buildings, facilities and equipment suitable or necessary for collecting, receiving, transferring, placing, confining, compacting, treating or covering solid waste or for processing solid waste by, without limitation, incinerating, composting, separating, grinding, shredding, reducing or otherwise modifying the characteristics or properties thereof, including all property, real and personal, appurtenant thereto or connected with such work; and

(11) "State of Tennessee" means the state of Tennessee and, unless otherwise indicated by the context, any agency, authority, branch, bureau, commission, corporation, department or instrumentality thereof now or hereafter existing.

(b) The definition of a term in subsection (a) applies to each grammatical variation of the term.

68-211-903. Solid waste authority - Creation - Resolutions - Agreements among creating counties and municipalities - Name.

(a) A county or any of the counties in a municipal solid waste region may create a solid waste authority, by resolution of the respective county governing bodies; provided, that opportunity shall be provided for public comment on such resolution. Any municipality, the majority of the territory of which lies within a county that is creating or participating with other counties in creating an authority, may join in creating the authority upon such terms as may be agreed upon and adopted by resolution of the respective county and municipal governing bodies. No authority may be formed unless each county governing body in the region has approved the resolution. If more than one county or municipality participates in creating an authority, an agreement creating the authority shall be approved by the governing body of each county and municipality that is a party to the agreement as part of the resolution creating the authority. The resolutions creating the authority may be amended by the agreement of all of the participating governments to add or subtract participating governments or to dissolve the authority. The creating resolutions shall give the authority a name which

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shall identify it with the county or region. This name shall be used by the authority unless the name is amended by resolution approved by all participating counties and municipalities. Any resolutions creating, amending or dissolving an authority shall be certified by the county clerk or municipal clerk or recorder of the counties and municipalities participating in creating the authority and sent to the secretary of state.

(b) (1) Notwithstanding the provisions of this part and part 8 of this chapter requiring municipal solid waste regions to be created prior to the formation of a regional solid waste authority, any county which, by resolution of its county legislative body adopted prior to April 14, 1992, created a regional solid waste authority referencing this part and part 8 of this chapter, and which has appointed a governing board prior to April 14, 1992, is hereby authorized to operate such authority in the manner established pursuant to such statutes and resolution only within the political boundaries of any such county and political subdivisions thereof to which this section applies. Any such resolution shall have the force and effect for which it was adopted from the date of passage; provided, that all flow control provisions established pursuant to 68-211-813(b), 68-211-906(b) and 68-211-907 cannot be exercised by such authority until such time as those provisions become effective as provided by general law.

(2) If such county becomes part of a multi-county region pursuant to 68-211-813(a), then within thirty (30) days following such action such authority, in agreement with the legislative bodies of those counties included in such municipal solid waste region, may:

(A) Continue the operation of such authority by retaining the same board of directors appointed to such authority pursuant to this subsection;

(B) Expand such board to include representation of members from such additional counties; or

(C) Dissolve the authority operating pursuant to this section and form a new regional authority pursuant to this part.

(3) If such county forms a single-county region pursuant to 68-211-813(a), then such authority may remain as an authority, authorized to operate under this part.

68-211-904. Board of directors - Members - Compensation.

(a) A resolution, creating or amending the resolution creating an authority for a county or approving an agreement to create an authority with other counties or municipalities, shall provide for the establishment of a board of directors to administer the activities of the authority. The authority’s board of directors may be the same board as that of the municipal solid waste region or it may be a separate board. If a board separate from that of the region is chosen, the board of

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directors shall consist of an odd number, not less than five (5) nor more than fifteen (15) members. Each county and municipality that is a member of an authority shall be represented by at least one (1) member on the board. The members of the board shall be appointed by the county executives and municipal mayors of the participating counties and municipalities, respectively, whose appointments must be approved by the respective county or municipal governing bodies. The members of the board shall serve for terms of six (6) years or until their successors are elected and are qualified by taking an oath of office, except that the initial board shall have approximately one third (1/3) of the members with terms of two (2) years and approximately one third (1/3) of the members with terms of four (4) years, so as to stagger the terms of office.

(b) Members of county and municipal governing bodies, county executives, municipal mayors, county and municipal officers and department heads may serve as directors, but the board of directors is not required to include such members.

(c) Directors may receive compensation if provided for by the resolution approved by all of the county and municipal governing bodies participating in the authority. The resolution establishing the compensation may differentiate between municipal and county officials and department heads so as to compensate only those directors who are not officials or employees of a municipal or county government, except for reimbursement for actual expenses.

68-211-905. Board of directors - Officers - Quorum - Vacancies - Removal of members.

(a) The directors shall meet and organize as a board and shall elect one (1) of its members as chairperson, one (1) as vice chairperson, one (1) as secretary and one (1) as treasurer, and such officers shall annually be elected thereafter in like manner. The duties of secretary and treasurer may be performed by the same director. In the absence of any of the chairperson, vice chairperson, secretary or treasurer, another member may be elected to fill the vacancy for the anticipated term thereof.

Any action taken by the directors under the provisions of this chapter may be authorized by resolution at any regular or special meeting, and such resolution shall take effect immediately and need not be published or posted. A majority of the board of directors shall constitute a quorum for the transaction of business. The concurring vote of a majority of all the directors shall be necessary for the exercise of any of the powers granted by this chapter.

(b) Any vacancy on the board shall be filled for the unexpired term by the same governing body which filled the position becoming vacant. Any member appointed to the board may, for reasonable cause, be removed from such member's office in the

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same manner and by the same governing body as such member was
appointed to the office; provided, that such removal shall be
preceded by a full hearing before the remaining members of the
board after adequate notice of such hearing, and a report of such
hearing shall be forwarded to such appointing authority.
"Reasonable cause" includes, but shall not be limited to,
misconduct in office, failure to perform duties prescribed by
this part, part 8 of this chapter or other applicable law, or
failure to diligently pursue the objectives for which the
authority was created.

68-211-906. Solid waste authorities - Public instrumentalities -
Powers - Exclusive jurisdiction and right to control collection
of solid waste within boundaries - Disposal of waste by
manufacturing firms.

(a) Each solid waste authority created pursuant to this part
shall be a public instrumentality of the county and municipal
government(s) participating in its creation or participating by
agreement after its creation. The authority shall have the
following powers, together with all powers incidental thereto or
necessary for the performance of such powers, to:

(1) Have succession by the name given in the resolution(s)
    creating the authority, unless dissolved as provided in this
    part;

(2) Sue and be sued and prosecute and defend, at law or in
equity, in any court having jurisdiction of the subject matter
and the parties;

(3) Have and use a corporate seal and alter the same at
    pleasure;

(4) Plan, establish, acquire, whether by purchase,
exchange, gift, devise, lease, the exercise of the power of
eminent domain or otherwise, and construct, equip, furnish,
improve, repair, extend, maintain and operate one (1) or more
projects, which projects shall be situated within the boundaries
of the county or counties with respect to which the authority
shall have been created, including all real and personal
property, facilities and appurtenances which the board of
directors of the authority may deem necessary in connection
therewith and regardless of whether or not any such project shall
then be in existence;

(5) Acquire, whether by purchase, exchange, gift, devise,
    lease, the exercise of the power of eminent domain or otherwise,
    any and all types of property, whether real, personal or mixed,
tangible or intangible and whether or not subject to mortgages,
liens, charges or other encumbrances and hold, sell, lease,
exchange, donate or convey any or all of its properties,
facilities or services, whenever the board of directors of the
authority shall find such action to be in furtherance of the
purposes for which the authority is hereby created;

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(6) Remove, receive, transport, collect, purchase, transfer or otherwise obtain solid waste for disposal or processing from any municipality, county, the state of Tennessee, the United States government or any agency thereof, the Tennessee valley authority or any person, and enter into contracts, agreements or other arrangements in connection therewith;

(7) Sell, transfer, distribute or otherwise dispose of electricity, steam, or other forms of power or energy or energy producing material or any other material, product or commodity resulting from the operation of any project, facility or service of the authority to any municipality, county, the state of Tennessee, the United States or any agency thereof, the Tennessee valley authority or any person, and enter into contracts, agreements or other arrangements in connection therewith;

(8) Make and enter into all contracts, trust instruments, agreements and other instruments with any municipality, the state of Tennessee, the United States government or any agency thereof, the Tennessee valley authority or any person, including, without limitation, bonds and other forms of indebtedness and contracts for the management and operation of any project, facility or service of the authority or the treatment, processing, storage, transfer or disposal of solid waste;

(9) Incur debts, borrow money, issue bonds and provide for the rights of the holders of such bonds;

(10) Pledge all or any part of the revenues and receipts of the authority to the payment of any indebtedness of the authority, and make covenants in connection with the issuance of bonds or other indebtedness or to secure the payment of such bonds or other indebtedness;

(11) Have control of its projects, facilities and services with the right and duty to establish and charge fees, rentals, rates and other charges for the use of the facilities and services of the authority, and the sale of materials or commodities by the authority, and collect revenues and receipts therefrom, not inconsistent with the rights of holders of its bonds;

(12) Apply for and accept donations, contributions, loans, guaranties, financial assistance, capital grants or gifts from any municipality, county, the state of Tennessee, the United States government or any agency thereof, the Tennessee valley authority or any person for or in aid of the purposes of the authority and enter into agreements in connection therewith;

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

(14) Exercise all powers expressly given in this part and in the creating or amending resolutions and establish bylaws and make all rules and regulations not inconsistent with the creating and amending resolutions or the provisions of this chapter.
deemed expedient for the management of the affairs of the authority;

(15) Enter onto any lands, waters and premises for the purpose of making surveys, soundings and examinations in and for the furtherance of the purposes authorized by this part and part 8 of this chapter at reasonable times and with written notice to property owners;

(16) Employ and pay compensation to such employees and agents, including attorneys, accountants, engineers, architects and financial advisors, as the board of directors shall deem necessary for the business of the authority;

(17) Authorize its employees to participate in the Tennessee consolidated retirement system pursuant to 8-35-243 and guarantee any outstanding liability incurred by such participation out of any funds or money of the authority available therefor;

(18) Use in the performance of its functions the officers, agents, employees, services, property, facilities, records, equipment, rights and powers of any county or counties, or municipalities with respect to which the authority shall have been created, with the consent of such county or counties, or municipalities and subject to such terms and conditions as may be agreed upon; and

(19) Exercise all powers expressly given to it and establish and make rules and regulations not inconsistent with the provisions of this part and part 8 of this chapter, deemed expedient for the management of the authority's affairs.

(b) Except as otherwise provided in this part, an authority, with the concurrence of the county governing body in any county for the territory outside of municipal boundaries, and the governing body of any municipality for the territory of the municipality, may exercise exclusive jurisdiction and exclusive right to control the collection of solid waste within its boundaries, and to control the disposition of solid waste collected within its boundaries.

(c) The power granted to an authority by this section shall not prevent a manufacturing firm which holds a permit from the state of Tennessee to dispose of or utilize its own solid wastes on the property of the manufacturing firm.

68-211-907. Exclusion or regulation of waste.

To the extent that a region's plan permits, an authority may restrict access to its solid waste disposal facilities by excluding waste originating with persons or entities outside the region. An authority may regulate the flow of all municipal solid waste within the county or counties constituting the authority. The authority may require the disposal of any transported waste at a specific solid waste disposal facility.

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68-211-908. Power of condemnation.

The authority is hereby authorized and empowered to condemn in its own name any land, rights in land, easements or rights-of-way situated within the territorial limits of the authority which, in the judgment of the board of directors, are necessary for carrying out the purposes for which the authority is created, and such property or interest in such property may be so acquired, whether or not the same is owned or held for public use by persons having the power of eminent domain, or otherwise held or used for public purposes; provided, that such prior public use will not be interfered with by the use to which such property will be put by the authority. Such power of condemnation may be exercised in the manner prescribed by title 29, chapter 16, or in the manner prescribed by any other applicable statute for the exercise of the power of eminent domain.

68-211-909. Counties and municipalities - Assignment or loan of employees and provision of facilities to authority.

For the purpose of aiding and cooperating with an authority, any county or municipality with respect to which such authority is created may assign or loan any of its employees, including its engineering staff and facilities, and may provide necessary office space, equipment or other facilities for the use of such authority.


(a) The authority has the power to issue bonds from time to time in order to accomplish its purposes. Except as herein otherwise expressly provided, all bonds issued by the authority shall be payable solely out of the revenue and receipts derived from the authority's projects or of any thereof as may be designated in the proceedings of the board of directors under which the bonds shall be authorized to be issued, including debt obligations of the lessee or contracting party obtained from or in connection with the financing of a project. Such bonds may be issued in one (1) or more series, may be executed and delivered by the authority at any time and from time to time, may be in such form and denomination and of such terms and maturities, may be subject to redemption prior to maturity either with or without premium, may be in fully registered form or in bearer form registerable either as to principal or interest, or both, may bear such conversion privileges and be payable in such installments and at such time or times not exceeding forty (40) years from the date thereof, may be payable at such place or
places whether within or without the state of Tennessee, may bear interest at such rate or rates payable at such time or times and at such place or places and evidenced in such manner, and may contain such provisions not inconsistent herewith, all as shall be provided in the proceedings of the board of directors whereunder the bonds shall be authorized to be issued.

(b) Bonds of the authority shall be executed in the name of the authority by such officers of the authority and in such manner as the board of directors may direct, and shall be sealed with the corporate seal of the authority. If so provided in the proceedings authorizing the bonds, the facsimile signature of any of the officers of the authority may appear on such bonds and a facsimile of the corporate seal of the authority may appear on the bonds in lieu of the manual signature of such officer and the manual impress of such seal; provided, that at least one (1) of the signatures appearing on such bonds shall be a manual signature. Interest coupons attached to such bonds shall be executed with the facsimile signatures of the officers who shall execute the bonds, who shall adopt as and for their own signatures their respective facsimile signatures appearing on such coupons. Bonds issued under this chapter, and the coupons appurtenant thereto, bearing the signature of any officer in office on the date of signing thereof shall be valid and binding obligations, notwithstanding that before the delivery thereof such person shall have ceased to be an officer of the authority.

(c) Any bonds of the authority may be sold at public or private sale for such price and in such manner and from time to time as may be determined by the board of directors of the authority to be most advantageous, and the authority may pay all expenses, premiums and commissions which its board of directors may deem necessary or advantageous in connection with the issuance thereof.

(d) All bonds of the authority and the interest coupons applicable thereto are hereby made and shall be construed to be negotiable instruments.

(e) Interim certificates or notes or other temporary obligations issued by the authority pending the issuance of its revenue bonds shall be payable out of revenues and receipts in like manner as such revenue bonds, and shall be retired from the proceeds of such bonds upon the issuance thereof, and shall be in such form and contain such terms, conditions and provisions consistent with the provisions of this part and part 8 of this chapter as the board of directors may determine.

(f) (1) Any bonds or notes of the authority at any time outstanding may at any time and from time to time be refunded by the authority by the issuance of its refunding bonds in such amount as the board of directors may deem necessary, but not exceeding the sum of the following:

(A) The principal amount of the obligations being refinanced;

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(B) Applicable redemption premiums thereon;
(C) (i) Unpaid interest on such obligations to the date of delivery or exchange of the refunding bonds;
      (ii) In the event the proceeds from the sale of the refunding bonds are to be deposited in trust as hereinafter provided, interest is to accrue on such obligations from the date of delivery to the first or any subsequent available redemption date or dates selected, in its discretion, by the board of directors, or to the date or dates of maturity, whichever shall be determined by the board of directors to be most advantageous or necessary to the authority;
(D) A reasonable reserve for the payment of principal of and interest on such bonds and/or a renewal and replacement reserve;
(E) If the project to be constructed from the proceeds of the obligations being refinanced has not been completed, an amount sufficient to meet the interest charges on the refunding bonds during the construction of such project, and for two (2) years after the estimated date of completion (but only to the extent that interest charges have not been capitalized from the proceeds of the obligations being refinanced); and
(F) Expenses of the authority, including bond discount, deemed by the board of directors to be necessary for the issuance of the refunding bonds.
   (2) A determination by the board of directors that any refinancing is advantageous or necessary to the authority, or that any of the amounts provided in the preceding sentence should be included in such refinancing, or that any of the obligations to be refinanced should be called for redemption on the first or any subsequent available redemption date or permitted to remain outstanding until their respective dates of maturity, shall be conclusive, provided, that prior to the adoption by the board of directors of the resolution authorizing the issuance of refunding bonds under this section, the plan for refunding shall be submitted to the state director of local finance for review, and the state director may report thereon to the board of directors within fifteen (15) days from the date the plan is received by the state director, and the state director shall immediately acknowledge receipt in writing of the proposed refunding plan. After receiving the report of the state director or after the expiration of fifteen (15) days from the date the refunding plan is received by the state director, whichever date is earlier, the board of directors may take such action with reference to such proposed refunding plan as it deems advisable.
(g) Any such refunding may be effected whether the obligations to be refunded shall have then matured or shall thereafter mature, either by sale of the refunding bonds and the application of the proceeds thereof to the payment of the obligations to be refunded thereby, or by the exchange of the refunding bonds for the obligations to be refunded thereby with
the consent of the holders of the obligations so to be refunded, and regardless of whether or not the obligations to be refunded were issued in connection with the same projects or separate projects, and regardless of whether or not the obligations proposed to be refunded shall be payable on the same date or different dates or shall be due serially or otherwise.

(h) Unless the obligations to be refunded are to be retired at the time of delivery of the refunding bonds, the board of directors shall, prior to the issuance of the refunding bonds, cause notice of its intention to issue the refunding bonds to be given to the holders of the outstanding obligations by publication of an appropriate notice once (1) time each in a newspaper having general circulation in a municipality with respect to which the corporation was organized and in a financial newspaper published in New York, New York, and having national circulation. Such notice shall identify the obligations proposed to be refunded and set forth the estimated date of delivery of the refunding bonds. As soon as practicable after the delivery of the refunding bonds, and whether or not any of the obligations to be refunded are to be called for redemption, the board of directors shall cause notice of the issuance of the refunding bonds to be given in the manner provided in this subsection. If any of the obligations to be refunded are to be called for redemption, the board of directors shall cause notice of redemption to be given in the manner required by the resolution or ordinance authorizing such outstanding obligations.

(i) The principal proceeds from the sale of any refunding bonds shall be applied, only as follows, to either:

(1) The immediate payment and retirement of the obligations being refunded; or

(2) To the extent not required for the immediate payment of the obligations being refunded, then such proceeds shall be deposited in trust together with any investment income thereon to provide for the payment and retirement of the obligations being refunded, and to pay any expenses incurred in connection with such refunding, but provision may be made for the pledging and application of any surplus for any purposes of the authority including, without limitation, provision for the pledging of any such surplus to the payment of the principal of and interest on any issue or series of refunding bonds or other obligations of the authority. Money in any such trust fund may be invested in direct obligations of, or obligations the principal of and interest on which are guaranteed by, the United States government, or obligations of any agency or instrumentality of the United States government, or in certificates of deposit issued by a bank or trust company located in the state of Tennessee, if such certificates shall be secured by a pledge of any of the obligations having an aggregate market value, exclusive of accrued interest, equal at least to the principal amount of the certificates so secured. Nothing herein

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shall be construed as a limitation on the duration of any deposit in trust for the retirement of obligations being refunded but which shall not have matured and which shall not be presently redeemable or, if presently redeemable, shall not have been called for redemption.

68-211-911. Principal of and interest on bonds - Security - Guarantees.

(a) The principal of and interest on any bonds issued by the authority shall be secured by a pledge of such revenues and receipts out of which the same may be made payable. The proceedings under which the bonds are authorized to be issued may contain any agreements and provisions respecting the maintenance of the projects or other facilities covered thereby, the fixing and collection of rents, fees or payments with respect to any projects, facilities, or systems or portions thereof covered by such proceedings, the creation and maintenance of special funds from such revenues and from the proceeds of such bonds, and the rights and remedies available in the event of default, all as the board of directors shall deem advisable and not in conflict with the provisions of this part and part 8 of this chapter. To the extent provided in the proceedings authorizing any bonds of the authority, each pledge and agreement made for the benefit or security of any of the bonds of the authority shall continue effective until the principal of and interest on the bonds for the benefit of which the same were made shall have been fully paid or adequate provision for the payment thereof shall have been made by the authority. In the event of default in such payment or in any agreements of the authority made as a part of the proceedings under which the bonds were issued, such payment or agreement may be enforced by suit, mandamus, or the appointment of a receiver in equity, or any one (1) or more of such remedies, all as provided in the proceedings under which the bonds are issued.

(b) Any county or municipality that participates in the creation or organization of an authority may guarantee or otherwise secure the payment of bonds, notes or similar obligations of the authority by resolution of the county governing body or by municipal ordinance. Any county or municipality seeking to guarantee or secure the payment of a bond obligation of an authority may pledge any discretionary revenues and/or may pledge the full taxing powers of the county or municipality. Prior to any meeting of a county or municipal governing body considering action to guarantee or secure the payment of any bond, note or similar obligation of an authority, reasonable public notice shall be published describing the matter to be considered and containing an estimate of the dollar amount of any contingent liability that may be authorized. Any resolution or ordinance of a county or municipality approving of
a guarantee or otherwise providing security for the payment of an authority's bonds, notes or similar obligations shall specify the officer or officers of the county or municipality authorized to execute documents necessary to implement the governing body's action.

68-211-912. Counties and municipalities - Liability.

No county or municipality shall be liable for the payment of the principal or interest on any bonds, notes or other instruments evidencing indebtedness of the authority except as provided in this part. Neither shall any county or municipality be liable for the performance of any pledge, mortgage, obligation or agreement of any kind whatsoever which may be undertaken by the authority except as provided in this part.

68-211-913. Revenues and income of authority - Directors and employees.

No part of the revenues or income of the authority shall inure to the benefit of any director or employee of the authority except as expressly authorized by this part.

68-211-914. Authority as public instrumentality - Exemption from taxation - Bonds deemed to be securities.

(a) The authority is hereby declared to be performing a public function in behalf of each county or municipality with respect to which it is organized and to be a public instrumentality of such county, counties, municipality or municipalities. Accordingly, the authority and all properties at any time owned by it and the income therefrom and all bonds issued by it and the income therefrom shall be exempt from all taxation in the state of Tennessee.

(b) Also, for purposes of the Tennessee Securities Act of 1980, compiled in title 48, chapter 2, part 1, bonds issued by the authority shall be deemed to be securities issued by a public instrumentality or a political subdivision of the state of Tennessee.

68-211-915. Annual audit - Cost - Copies of audit available to public.

Except as otherwise approved by the comptroller of the treasury, any authority created pursuant to this chapter has the power and shall cause to be made an annual audit of the accounts and records of the authority. The audit shall include all funds of the authority, whether held by the authority or pursuant to trust indentures. The comptroller shall be responsible for ensuring that the audits are prepared in accordance with

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generally accepted governmental auditing standards and determining if the audits meet minimum audit standards which shall be prescribed by the comptroller. No audit may be accepted as meeting the requirements of this section until such audit has been approved by the comptroller. The audits may be prepared by certified public accountants, public accountants or by the division of state or county audit. In the event the authority shall fail or refuse to have the audit prepared, then the comptroller may appoint a certified public accountant or public accountant or direct the division of state or county audit to prepare the audit. The cost of such audit shall be paid by the authority. All such audits shall be completed as soon as practicable after the end of the authority's fiscal year. One (1) copy of the audit shall be furnished to each member of the board of directors, the chief executive officer(s) of the county or counties with respect to which the authority has organized and the comptroller. Copies of each audit shall also be made available to the public.

68-211-916. Contracts with governmental entities authorized - Duration - Payments to authority - Funding.

(a) The state of Tennessee or any county or municipality within the solid waste region is hereby authorized, whenever the same shall be found desirable by its governing body, to enter into contracts, agreements or other arrangements with the authority regarding any project, facility or service of the authority, including, without limitation, the collection, transfer, storage, transportation, processing or disposal of solid waste or the purchase, sale, lease or other disposition of energy, energy producing materials and other materials, commodities or properties of the authority. Any such contract or agreement may extend for any period not exceeding forty (40) years from the date thereof.

(b) Any payments to be made to the authority pursuant to an agreement may be payable from general funds, to the extent permitted by law, or from such limited source as may be agreed upon between the authority and such entity, and in the case of payments to be made from general funds, the governing body of any municipality having the taxing power may provide for the levy and collection of a direct, annual tax sufficient to make such payments to the authority when the same become due. Such tax shall be assessed, levied, collected and paid in like manner as other taxes of such municipality and shall be in addition to all other taxes now or hereafter authorized to be levied by such municipality. Such tax shall not be included within any statutory or other limitation as to rate or amount for such municipality, but shall be excluded therefrom and be in addition thereto and in excess thereof.

(c) The governing body of any municipality not having the
taxing power shall, upon entering into an agreement with the authority, make adequate provision for the timely payment of all amounts to be paid to the authority.

(d) No payments shall be construed to be an indebtedness of a municipality within the meaning of any constitutional or statutory provision.

68-211-917. Powers of authorities cumulative - Powers of governmental entities.

Neither this part nor anything herein contained shall be construed as a restriction or a limitation upon any powers which the authority might otherwise have under any laws of this state, but shall be construed as cumulative of and supplemental to any such powers. No proceeding notice or approval shall be required with respect to the issuance of any bonds of the authority or any instrument as security therefor except as provided in this part, notwithstanding any law to the contrary; provided, that nothing herein shall be construed to deprive the State of Tennessee and its governmental subdivisions of their respective police powers over properties of the authority, or to impair any power of any official or agency of this state and its governmental subdivisions which may be otherwise provided by law.

68-211-918. Counties and municipalities - Powers - Violation of ordinances or resolutions - Penalty - Injunctive relief.

(a) Any county or municipality with respect to which the authority was organized has all necessary powers in order to further the purposes of this part, including, without limitation, the power to:

(1) Provide that any funds available to it for solid waste or resource recovery purposes shall be paid directly to the authority; and

(2) Sell, lease, dedicate, donate or otherwise convey to the authority any of its interest in any existing solid waste disposal or resource recovery facility or other related property, or grant easements, licenses or other rights or privileges therein to the authority.

(b) The governing body of each county or municipality participating in the organization of the authority may appropriate general funds or unappropriated moneys from any other fund, to pay expenses of the authority or provide for the operation of any of the projects, facilities and systems authorized by this part, and each such governing body may levy a tax, in addition to all other taxes, upon all taxable property within the respective county or municipality, sufficient to pay such appropriation to the authority. Any such tax on property shall be collected in the same manner as other property taxes of the county or municipality are collected and, similarly, all laws

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for the enforcement of county and municipal tax liens shall apply.
(c) Any person who willfully violates any of the ordinances
or resolutions passed by any of the municipalities or any county
or counties with respect to which the authority was organized or
willfully fails, neglects or refuses to comply with such
ordinances or resolutions commits a Class A misdemeanor. Each day
of continued violation constitutes a separate offense.
(d) In addition to the penalties provided herein, the
municipalities and any county or counties with respect to which
the authority was organized may enforce any ordinances,
resolutions or contracts issued or entered into to carry out the
provisions of this section by instituting legal proceedings to
enjoin the violation of the provisions of this section, in any
court of competent jurisdiction, and such court may grant a
temporary or permanent injunction restraining the violation of
this section.

68-211-919. Acquisition of project sites - Method -
Authorization.

Any county or municipality with respect to which the
authority was organized may acquire a project site by gift,
purchase, lease or condemnation, and may transfer any project
site to the authority by sale, lease or gift. Such transfer may
be authorized by a resolution of the governing body of such
county or municipality without submission of the question to the
voters, and without regard to the requirements, restrictions,
limitations or other provisions contained in any other law.

68-211-920. Contracts with solid waste authorities - Municipal
corporations and counties - With taxing power - Without taxing
power.

(a) Whenever, and as often as, a municipal corporation or
county having taxing power enters into a contract with a solid
waste authority or other contracting party under the provisions
of this part, the governing body of such municipal corporation or
county shall provide by resolution for the levy and collection of
a tax sufficient to pay when due the annual amount payable under
such contract as and when it becomes due and payable, and to pay
any expenses of maintaining and operating the project required to
be paid by the municipal corporation or county under the terms of
such contract or by instrument collateral thereto and,
furthermore, to pledge such tax and the full faith and credit of
the municipal corporation or county to such payments. Such tax
shall be assessed, levied, collected and paid in like manner as
other taxes of the municipal corporation or county. Such tax
shall not be included within any statutory or other limitation of
rate or amount for such municipal corporation or county, but

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shall be excluded therefrom and be in addition thereto and in excess thereof, notwithstanding and without regard to the prohibitions, restrictions or requirements of any other law, whether public or private. There shall be set aside from such tax levy into a special fund an amount sufficient for the payment of the annual amount due under any such contract, and the money in such fund shall be used exclusively for such purpose and shall not be used for any other purpose until such annual amount has been paid in full. The foregoing shall not be construed to limit the power of the authority or other contracting party to enter into contracts with a municipal corporation not having the power of taxation.

(b) The governing body of any municipal corporation not having the power of taxation and the state of Tennessee shall, upon entering into a lease, loan agreement or sales contract with a public building authority or other contracting party, make adequate provision for the payment of the annual amount payable under the lease, loan agreement or sales contract.

68-211-921. Execution of written instruments by authorities.

Except as otherwise provided in this chapter, all leases, contracts, deeds of conveyance, or instruments in writing executed by the authority shall be executed in the name of the authority by the chairperson and secretary of the authority, or by such other officers as the board of directors, by resolution, may direct, and the seal of the authority shall be affixed thereto.

68-211-922. Joint exercise of power by authorities.

The powers herein conferred upon authorities created under this chapter may be exercised by two (2) or more such authorities acting jointly.

68-211-923. Cumulative powers of authorities - Police powers of governmental entities - Projects.

(a) Neither this part nor anything herein contained shall be construed as a restriction or limitation upon any powers which an authority, as a public corporation, might otherwise have under any laws of this state, but shall be construed as cumulative of any such powers.

(b) No proceedings, notice or approval shall be required for the organization of the authority or the issuance of any bonds or any instrument as security therefor, except as herein provided, notwithstanding any other law to the contrary; provided, that nothing herein shall be construed to deprive the state and its governmental subdivisions of their respective police powers over properties of the authority, or to impair any power hereover of

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any official or agency of the state and its governmental subdivisions which may be otherwise provided by law.
(c) Projects may be acquired, purchased, constructed, reconstructed, improved, bettered and extended and bonds may be issued under this chapter for such purposes, notwithstanding that any other general, special or local law may provide for the acquisition, purchase, construction, reconstruction, improvement, betterment and extension of a like project, or the issuance of bonds for like purposes, and without regard to the requirements, restrictions, limitations or other provisions contained in any other general, special or local law.

68-211-924. Dissolution of authority - Procedure - Allocation of assets.

Any resolution of dissolution of the authority shall be approved by all county and municipal governing bodies participating in the organization of the authority. A resolution to dissolve the authority shall contain adequate provisions to divide the assets and liabilities of the authority among the participating county and municipal governments in an equitable manner if the authority has assets in excess of liabilities. In the event that the authority has liabilities in excess of assets, the authority may be dissolved only after it has ceased to substantially perform the functions for which it was created due to insolvency. In such cases of insolvency of the authority, the assets of the authority shall be allocated among the creditors of the authority in an equitable manner by agreement of the creditors with the board of directors of the authority, or if such agreement cannot be reached within ninety (90) days of the passage of the resolution to dissolve the authority and approval of such a resolution by all participating county and municipal governing bodies, then the board of directors shall petition the chancery court for an equitable allocation of assets. The chancery court shall hear the cause and shall enter a decree for the allocation of the assets of the authority. After the final disposition of the assets of the authority, the board of directors and the authority shall cease to exist.

68-211-925. Liberal construction.

The provisions of this part are remedial in nature and shall be liberally construed to effect its purpose of providing for a systematic and efficient means of solid waste disposal and encouraging the best utilization and conservation of energy and natural resources.

68-211-1001. Short title.

This part shall be known and may be cited as the "Used Oil

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# Chapter 13
Flow Control and Permit Application Review

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Chapter 13
Flow Control and Permit Application Review

General
The following is from the Solid Waste Management Act of 1991:

"A region or solid waste authority may not impair the obligations of contracts entered into before the date of approval of the region’s plan in violation of Article 1, Section 20, of the Constitution of the State of Tennessee."

"A region or solid waste authority may not restrict the movement of recovered materials into, out of, or within the region."

Out of Region Ban

Out of region bans are permitted by the Solid Waste Management Act of 1991 in order to permit a region to carefully shepherd the capacity of its solid waste management facilities. There may be a legal question as to Houston County Solid Waste Planning Region the validity of an out of region ban applied to a private facility.

The following is from the Solid Waste Management Act of 1991:

The region or authority may restrict access to any landfills and incinerators which dispose of municipal solid waste by excluding waste originating with persons or entities outside the region in order to effectuate the plan. If a facility within a region has accepted waste from a specific source outside the region prior to July 1, 1991, the region may not prohibit that facility from continuing to accept waste from that source, unless the facility’s acceptance of that waste significantly impairs the region’s ability to effectuate its plan.

At this time, the Houston County Solid Waste Planning Region elects not to impose an out of region ban on solid waste that originates from outside the region. However, the region reserves the right to impose an out of region ban in the future.

Intra-region Flow Control

The Solid Waste Management Act of 1991 permits a region to exercise intra-region flow control in order to address public health and safety, and transportation management concerns in a coordinated manner, and to permit regions to guarantee a flow of waste as a revenue stream
financing bonds for municipal solid waste facilities. Obviously, this is a significant issue if the region constructs regional facilities such as landfills, incinerators, balers, or other facilities that require large capital outlays. It is also an advantage if private bids are accepted for disposal, a better price can be obtained if the county offers its commodity (solid waste) as a lump offering.

The following is from the Solid Waste Management Act of 1991:

(b)(1)(A) If the director of the state planning office approves the plan, the region or solid waste authority, by resolution and subsequent adoption of ordinances by counties and municipalities in the region, may also regulate the flow of collected municipal solid waste generated within the region. Prior to the adoption of any resolution declaring the necessity of requiring mandatory flow of municipal solid waste, the region or authority, following one or more public hearings, shall demonstrate in writing to the Director of the State planning office that it has considered the utilization of any municipal solid waste management facility in existence within the region of the effective date of this act which meets the proposed or final federal Resource Conservation and Recovery Act (RCRA) Subtitle D regulations.

At this time, the Houston County Solid Waste Planning Region elects not to impose intra-region flow control on solid waste from private industries or private commercial businesses or municipal solid waste. The region reserves the right to modify this position in the future.

Plans Review for New Solid Waste Facilities

The Solid Waste Management Act of 1991 requires a region with an approved plan, or an authority formed by the region, to review plans for a new solid waste disposal facility or incinerator to determine whether the proposed facility is consistent with the regional plan.

The following is taken from the Solid Waste Management Act of 1991:

"After the plan is approved, the region must approve any application for a permit for a solid waste disposal facility or incinerator within the region as consistent with the region’s disposal needs before any permit is issued by the commissioner pursuant to Tennessee Code Annotated, Title 68, Chapter 31."

"An applicant for a permit for construction or expansion of
a solid waste disposal facility or incinerator shall submit a copy of the application to the region at or before the time the application is submitted to the commissioner. The region shall review the application for compliance with the provisions of the section, and shall conduct a public hearing after public notice has been given in accordance with Tennessee Code Annotated, title 8, chapter 44, prior to making the determination provided for in this subdivision. The hearing shall afford all interested persons an opportunity to submit written and oral comments, and the proceeding shall be recorded and transcribed. The region shall render a decision on the application within ninety (90) days after receipt of a complete application. The region shall immediately notify the commissioner of its acceptance or rejection of an application.

"(B) The region may reject an application for a new solid waste disposal facility or incinerator or expansion of an existing solid waste disposal facility or incinerator within the region only upon determining that the application is inconsistent with the solid waste management plan adopted by the county or region and approved by the state planning office and the region shall document in writing the specific grounds on which the application is inconsistent with the solid waste management plan adopted by the county or region and approved by the state planning office and the region shall document in writing the specific grounds on which the application is inconsistent with such plan."

"(C) Where a region rejects an application, the commissioner shall not issue the permit unless the commissioner finds that the decision of the region is arbitrary and capricious and unsupported in the record developed before the region."

"(D)" Appeal of final actions of the region, including any determination under subsection (b)(2)(B) of this section, shall be taken by an aggrieved person within thirty (30) days to the Davidson County Chancery Court. The court shall exercise the same review as it would in a case arising under Tennessee Code Annotated, Title 4, Chapter 5. For the purposes of this section, an ‘aggrieved person’ shall be limited to persons applying for permits, persons who own property or live within a three (3) mile radius of the facility or site that is proposed for permitting, or cities and counties in which the proposed facility is located."

"If the region has formed a solid waste authority pursuant to this act, then the authority shall approve any such permit applications as provided for in this section instead of the region."

"(C) Appeal of final actions of the region or authority, including any determinations under subdivision (b)(1), shall be taken by an aggrieved person within thirty (30) days to any chancery court in the region or authority which took such final action."

An applicant for permit for construction or expansion of a solid waste disposal facility
or incinerator shall submit a complete copy of the Part I and Part II application to the chairman of the region (or subsequent authority) at the time the application is submitted to the commissioner. The chairman shall call a meeting of the region members within 30 days of receipt of the copy of the application and set a date for a public hearing. The public hearing is to be held within 60 days after receipt of the copy of the application (either Part I or Part II). The region shall review and determine if the facility is consistent with the region's solid waste plan within 90 days after receipt of a complete Part II application. The region will immediately notify the commissioner of its acceptance or rejection of the application. If the application is rejected, the region will document in writing to the commissioner the specific grounds on which the application is inconsistent with the solid waste plan.
Appendix A

Legal Documentation and

Organization of the Region
RESOLUTION NO. _____

A RESOLUTION

CREATING HOUSTON COUNTY’S MUNICIPAL SOLID WASTE PLANNING REGION

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

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

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

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

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

WHEREAS, Houston County’s Board of County Commissioners has given consideration to the needs assessment prepared by the Greater Nashville development district; and

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

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

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

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

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

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

BE IT FURTHER RESOLVED, that pursuant to T.C.A. §§68-211-813(a)(2), that the Board of County Commissioners of Houston County, Tennessee finds and determines that Houston County shall be and shall constitute a single county municipal solid waste region due to the following: Houston County presently does not operate and maintain a solid waste landfill and it is the consensus of the County Executive and County Court that for financial reasons Houston County should be a single solid waste region; and

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

BE IT FURTHER RESOLVED, that this Municipal Solid Waste Region Board shall be composed of nine (9) members; and
BE IT FURTHER RESOLVED, that pursuant to T.C.A. §68-211-813(b)(1) Houston County Board members shall be appointed by the County Executive and approved by this Board of County Commissioners and, due to the fact that The Cities of Erin and Tennessee Ridge collect or provide disposal services through its own initiative or by contract, the Cities of Erin and Tennessee Ridge shall have a Board member. This member shall be the Mayor of each city; and

BE IT FURTHER RESOLVED, that members of the Board of the Municipal Solid Waste Region shall serve a six (6) year term except that two members appointed by the County Executive shall have a four (4) year term, that one member shall have a two (2) year term, and that the Mayors of Erin and Tennessee Ridge shall have a two (2) year term. The proposed board members and the length of their terms is as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Length of Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honorable George E. Clark</td>
<td>6 Years</td>
</tr>
<tr>
<td>Phil Averitt</td>
<td>6 Years</td>
</tr>
<tr>
<td>Donnie Lewis</td>
<td>6 Years</td>
</tr>
<tr>
<td>Gus Norfleit</td>
<td>4 Years</td>
</tr>
<tr>
<td>Tommy Meadows</td>
<td>4 Years</td>
</tr>
<tr>
<td>Darrell Kingsmill</td>
<td>4 Years</td>
</tr>
<tr>
<td>J. C. Clark</td>
<td>2 Years</td>
</tr>
<tr>
<td>Honorable Fred Finley</td>
<td>2 Years</td>
</tr>
<tr>
<td>Honorable Robert Brown</td>
<td>2 Years</td>
</tr>
</tbody>
</table>

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

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

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

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

RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF HOUSTON COUNTY, TENNESSEE, this 19th day of September, 1994, the welfare of the citizens of Houston County requiring it.

Sponsor:

[Signature]
County Commissioner, Chairman

Approved:

[Signature]
County Executive

Approved as to form:

[Signature]
County Attorney
Appendix B

Documentation for Adjustment to the Base Year Generation

Not Applicable
Appendix C

Public Participation Activities
A public hearing was held on May 16, 1994, to obtain input from citizens regarding this plan. The plan concept was presented. No negative responses were received. An attendance list is attached.
Edwin M. McClain

Fred Dylan

Kevin Foster

W.W. Johnson

Edgar Patterson

Marilyn Powell

Wife of Jenkins

Laura Mann

Jan Maurer

V. Ogden

J. Oglin

C. R. Forty, M.D.

Mary G. Bozarth

Roy E. Fuqua

Bobby Hill

May 16, 1994
Appendix D

Exports and Imports
REFUSE COLLECTION SERVICES CONTRACT

THIS AGREEMENT, made and entered into between Houston County, Tennessee, hereinafter called the "County" and ASCO Sanitation, a Corporation, hereinafter called the "Contractor".

WITNESSETH:

THAT WHEREAS, the County has the authority to contract for county-wide refuse collection services, and

WHEREAS, a land area in the County has been prepared as a refuse collection site, and the Contractor has knowledge of the location of such collection site; and

WHEREAS, the County has heretofore advertised for and received bids for refuse collection and disposal services, and the bid submitted by the Contractor was the bid duly accepted by the County; and the bid document or the "Notice to Bidders", containing a description of the services to be performed and the equipment to be provided by the person receiving the award of the contract; and the document providing a place for signing for the person submitting a bid; and

WHEREAS, the signature of the Contractor to such bid document attests to the fact of the Contractor's agreement to perform the services and furnishing of equipment according to the terms thereof, including the terms as to charges therein supplied by the Contractor.

NOW, THEREFORE, THE COUNTY AND THE CONTRACTOR CONTRACT AND AGREE AS FOLLOWS:

1. A copy of the bid document is attached as "Exhibit A" hereto, and the terms and provisions thereof being incorporated herein by reference.

2. The contractor shall furnish all labor, supervision, equipment and appurtenant items for the collection, transportation and disposal of refuse for the County.

3. The term of this contract is for a period of three years, beginning on the 1st day of December, 1991, and ending on the 31st day of December, 1994. The County shall have the option to renew this contract for an additional period of three years, based on the same terms of this contract, with increased costs to County as provided for by the term of this contract.

4. The consideration to be paid by the County shall be based upon the following calculations:

   a. Equipment use cost (monthly):
      1. Four-Cubic Yard Stationary Compactor $202.00
      2. Two (2) Forty-Two Cubic Yard Compactor Boxes 198.00
      3. Two (2) Forty Cubic Yard Open Top Boxes 140.00
      TOTAL MONTHLY FOR EQUIPMENT COST $540.00

   b. Service and Disposal Cost
      The charge by the Contractor per load, including landfill disposal cost, shall be as follows: 1. $365.00 for Forty-Two Cubic Yard Load and 2. $340.00 for Forty Cubic Yard Load.

   It is understood between the parties that the above amounts may increase or decrease based upon the following:

   a. Change in landfill disposal charges to Contractor
b. Change in costs to Contractor resulting additional or lesser miles to approved landfill site necessary for refuse disposal.

c. Dramatic increase in costs of diesel fuel over and above prices existing at date of bid.

d. Increase in cost of living based on consumer price index.

It is understood that the Contractor shall submit to the County monthly an invoice of charges to the County and the County shall make payment within ten (10) days from the receipt of such invoice.

It is understood between the parties that should the Contractor insist that an increase is necessary because of the increase in the costs as mentioned, then the County shall be informed in writing of the intention of the Contractor to make such an increase, and whereupon a meeting shall be arranged within ten (10) days between the parties for a discussion of the necessity of such an increase.

5. The "Notice to Bidders" including the bid document, attached hereto as "Exhibit A" contains statements relative to the obligations of the County and obligations as to the successful bidder, and all terms, and provisions thereof are incorporated herein by reference and made a part hereof by reference to the same extent as if copied herein verbatim, and the parties do hereby, by the execution of this contract acknowledge their understanding of such obligations.

6. Both parties shall have a right to terminate this contract for the failure to perform their obligations hereunder and in the event that such termination results in a court proceedings the prevailing party shall be entitled to recover compensatory damages and costs of the cause, including a reasonable attorney's fee.

7. This contract may be enforced by action of specific performance by a court having jurisdiction thereof.

8. For the purpose of jurisdiction of a court, in the event of any issue which may arise under the terms of this contract, it is agreed that the contract was entered into in Houston County, Tennessee.

WITNESS OUR HANDS, this the 18th day of December, 1991.

HOUSTON COUNTY
By: George E. Clark
County Executive

ASCO SANITATION
By: Anthony Smith
President
STATE OF TENNESSEE
COUNTY OF HOUSTON

Personally appeared before me, the undersigned, a Notary Public in and for said county and state aforesaid, George E. Clark, with whom I am personally acquainted, and who, upon oath, acknowledged himself to be the County Executive of Houston County, Tennessee, a Political Division of the State of Tennessee, and who, he as such official, being authorized to so do, executed the foregoing instrument for the purposes therein contained.

WITNESS MY HAND and official seal at, Erin, Tennessee, this the 10th day of December, 1991.

My commission expires: 9/21/93
Notary Public

STATE OF TENNESSEE
COUNTY OF HOUSTON

Personally appeared before me, the undersigned, a Notary Public in and for said county and state aforesaid, Anthony Smith, with whom I am personally acquainted, and who, upon oath, acknowledged himself to be the President of ASCO Sanitation, a Corporation, and who, he as such official, being authorized to so do, executed the foregoing instrument for the purposes therein contained.

WITNESS MY HAND and official seal at, Erin, Tennessee, this the 18th day of December, 1991.

My commission expires: 9/21/93
Notary Public

This Instrument Prepared By:
William C. Knott, Jr.
Attorney at Law
P.O. Box 290
Erin, TN 37061
3. The Contractor shall procure and keep in force policies providing for insurance as hereinafter stated. Such policies shall be non-cancellable. (A Certificate of Insurance describing the coverage shall be furnished by the Contractor annually and shall contain appropriate wording to the effect that the policies described cover the Contractor's operation under the Contract. On the general liability policy and the motor vehicle policy, Houston County, Tennessee, its agents, officers, and employees shall be named as additional insureds.

A. Workmen's Compensation: Statutory coverage which shall include the filing by the employer with the Division of Workmen's Compensation the "Notice of Full Coverage of all Occupation Diseases" as provided by the Statute.

B. General Liability: Insurance with limits of Five Hundred Thousand Dollars ($500,000.00) per person in any one claim and subject to that limit for each person; Five Hundred Thousand ($500,000.00) per two or more persons in any one accident for bodily injury liability on the comprehensive form, and including coverage for intentional acts.

C. Automobile Public Liability and Property Damage: Insurance with limits of Five Hundred Thousand Dollars ($500,000.00) per person in any one claim, and subject to that limit for each person; Five Hundred Thousand Dollars ($500,000.00) for two or more persons in any one accident for bodily injury liability and Fifty Thousand Dollars ($50,000.00) for property damage liability on the comprehensive form covering all owned, non-owned, and hired automobiles which will be used in connection with the work to be done under this Contract, and which are or are not for use exclusively on the premises at which the work under such Contract is performed. The Contractor may purchase at its own expense such additional or other insurance protection as it may deem necessary. Maintenance of the required minimum insurance protection does not relieve the Contractor of responsibility for any losses not covered by the above required policies.

4. The Contractor will furnish the following equipment:

One (1) Four-Cubic Yard Stationary Compactor with ability to operate on single phase power (220). Installation of the unit to include an extended hopper so as to accommodate a 20-Cubic Yard refuse truck.

Two (2) Forty-Two Cubic Yard Compactor Boxes.

Two (2) Forty Cubic Yard Shovel Baskets.

The Contractor will furnish the following service:
Compactor and open top container are to be serviced on a call-in basis. Contractor will respond to all service calls within a twenty-four hour period. Contractor will make trucks and equipment available to respond immediately in case of emergency.

Compactor and open top container loads will be hauled to a suitable sanitary landfill that meets or exceeds all current Government requirements.

Contractor will be responsible for all maintenance and upkeep of equipment.

Contractor pricing will be submitted to the County as follows:

<table>
<thead>
<tr>
<th>Equipment Costs</th>
<th>Monthly</th>
<th>Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service</td>
<td>42-Cubic Yard</td>
<td>40-Cubic Yard</td>
</tr>
<tr>
<td>Disposal</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. The Contractor will not be permitted to sublet the proposed Contract without prior written approval from Houston County.

6. Houston County reserves the right to reject all bids and to accept any proposal which it deems to be to the best advantage of Houston County. Bidders agree that Houston County will be under no obligation, morally or legally, to award a Contract for the collection and disposal of refuse.

7. All transport equipment shall be of a suitable type and in such number and condition as to maintain the desired level of service.

8. The Contractor shall obtain, at its expense, all permits and licenses required by law or ordinance and maintain the same in full force and effect.

9. The Contractor shall provide a telephone service from 8:00 a.m. to 5:00 p.m. five days a week for information and complaints.

10. Houston County will furnish or provide the following:

   A. Power at the site.
   B. General housekeeping and cleanup at and around the site.
   C. The road and required site preparation.
   C. Payment of the monthly power bill.

11. The County recognizes that within the contract period if certain costs increase to the Contractor that they would be passed on to the Owner. The Contractor shall list the items that would justify a change in the contract price. The County
would also ask for assurance that if any of the same or other items decreased in cost to the Contractor that these savings be passed on to the County.

12. **Equipment Cost** (Monthly or Yearly Lease)

**Description**

A. Four-Cubic Yard Stationary Compactor w/ability to operated on single phase power (220). Installation of the unit to include an extended hopper so as to accommodate a 20-Cubic Yard refuse truck.

<table>
<thead>
<tr>
<th>Description</th>
<th>Monthly</th>
<th>Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Four-Cubic Yard</td>
<td>$202.45</td>
<td>$2,424</td>
</tr>
<tr>
<td>B. Two (2) Forty-Two Cubic Yard</td>
<td>$198</td>
<td>$2,376</td>
</tr>
<tr>
<td>C. Two (2) Forty Cubic Yard-Open</td>
<td>$140</td>
<td>$1,680</td>
</tr>
<tr>
<td>Top Boxes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$540</td>
<td>$6,480</td>
</tr>
</tbody>
</table>

13. **Service and Disposal Costs**

**Description**

A. 42-Cubic Yard

B. 40-Cubic Yard

<table>
<thead>
<tr>
<th>Description</th>
<th>Per load</th>
<th>Monthly Landfill</th>
<th>Total per load</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. 42-Cubic Yard</td>
<td>$240</td>
<td>$120</td>
<td>$360</td>
</tr>
<tr>
<td>B. 40-Cubic Yard</td>
<td>$220</td>
<td>$120</td>
<td>$340</td>
</tr>
</tbody>
</table>

TOTAL

Respectfully submitted,

ASCO Sanitation

By Anthony Smith (signed)

Type or Print Name: President

Business Address: ASCO Sanitation

PO Box 42, Michie, WV 38357

Telephone No. (901) 239-9660

Contractor's License No. N/A

(SEAL - if bid is by a corporation)

Items affecting increase or decrease in price:
1. Landfill charges
2. Increase to other landfills which might be closer or further away
3. Dramatic increase in Diesel fuel prices or Cost of Living based on Consumer Price Index 12248
INTERLOCAL LANDFILL AGREEMENT

THIS AGREEMENT made and entered into on this 20TH day of DECEMBER, 1990, by and between the County of Houston, hereinafter called party of the first part, the City of Erin, Tennessee, hereinafter called party of the second part; and the City of Tennessee Ridge, hereinafter called party of the third part and both municipal corporations being located within Houston County, Tennessee.

WITNESSETH

WHEREAS, the parties hereto have heretofore participated in the operational costs of a sanitary landfill operation which is located in Houston County and upon lands owned by the party of the first part; and

WHEREAS, such landfill site must now be discontinued due to its near full capacity, and there must be additional lands acquire if the public demanded landfill operation is to continue; and it has been determined that the continued ownership and operation of a sanitary landfill shall serve a public purpose; and

WHEREAS, the governing bodies of each party has, by resolution duly adopted, decided to participate in a continued sanitary landfill operation project, including the sharing of both the costs of capital outlay expenditures and operational costs of such a project and it has been determined that the parties shall share such cost in the following percentages, to-wit: party of the first part - forty four (44%); party of the second part - thirty four (34%); and party of the third part - twenty two (22%); and

WHEREAS, the governing bodies of the parties hereto have determined that it would be to the best interest of the parties to enter into a contract wherein the parties are committed for a twelve year period of time to provide their respective share of such capital outlay and operational costs necessary for the survival of the landfill operation; and

WHEREAS, it has been determined by such governing bodies that the capital outlay expenditure costs, including land acquisition, construction of monitoring wells on both of the landfill sites,
the acquisition of lands and equipment, engineering and legal fees, and other costs incidental to the closing and opening of a new landfill site, to be in the amount of $324,100.00; and

WHEREAS, it has been determined that the estimated operation costs for the fiscal year beginning July 1, 1990 and ending June 30, 1991 to be in the amount of $72,060.00; and

WHEREAS, it has been determined by the respective governing bodies that it would be to the bests interest of the parties that the title to the lands to be acquired should vest in the party of the first part, and that the party of the first part cause to be issued interest bearing capital outlay note(s) in an amount not to exceed $324,100.00, with the principal and interest thereof becoming due and payable over a period of twelve years; and the governing bodies have each, by resolution duly adopted, committed the parties to the payment of the respective percentages of such obligations; and

WHEREAS, the governing bodies of the parties have determined that the business operation of the sanitary landfill shall be conducted by a Board composed of the Houston County Executive and the Mayors of the respective municipalities; and that such governing bodies have duly authorized such officials to enter into a contract in compliance with provisions of the resolutions duly adopted by the parties, and the parties do hereby contract and agree as follows:

1. That the term of this contract is for a term of twelve years effective July 1, 1990 and ending on June 30, 2002, unless otherwise extended by the parties. However, the parties shall be respectively committed to the payment of the respective shares of the capital outlay expenditures, as authorized by resolutions adopted prior to the date of execution hereof, should there be a balance outstanding upon the expiration of such twelve year period of time.

2. That Houston County cause to be acquired in the name of Houston County lands which must be acquired for the purpose of a sanitary landfill operation, at a costs mutually agreed upon by the parties, or as may be determined by an eminent domain proceedings if necessary.
3. That Houston County issue interest bearing capital outlay promissory notes in an amount not to exceed $324,100.00, and such notes to provide that one-twelfth of the principal and accrued interest thereon be paid each fiscal year; and each party is hereby committed to the payment of the respective percentages of such obligation on the due date thereof. The parties of the second and third part to make such payment to Houston County.

4. Each party does hereby pledge and commit itself to provide a budget, approved by the State Director of Local Finance, wherein an amount sufficient is budgeted for the parties respective share of the annual payment on the capital outlay note(s) the County issues for the purpose as set forth herein; and each party shall budget annually an amount sufficient to pay its respective share of the annually estimated operational costs which costs shall be estimated by the Sanitary Landfill Board. The parties of the second and third part shall pay such estimated cost share annually upon demand by the party of the first part and the party of the first part shall be responsible for and pay the operational expenses when due.

5. It is understood and agreed that should the expenses of the operation of subject landfill be greater than the estimated costs the parties shall make arrangements for and pay, when due, such increased amounts in the respective percentages herein agreed.

6. That all lands, equipment, and properties acquired for the purposes of Sanitary Landfill operation be acquired in the name of Houston County, however the parties of the second and third part shall have an equitable interest therein; and it is agreed that should such land, or any portion thereof, and properties be disposed of, such disposition shall be made pursuant to the laws of the State of Tennessee relating to the disposition of public properties by local governments. It is agreed that any net funds realized from such a disposition shall be shared by the parties in the respective percentages herein mentioned.

7. There is hereby created and established a Landfill Board designated and known as Houston County Landfill Board for the purpose of administering to the undertaking by the parties and the making of decisions relative to the sanitary landfill
operation. Any issue in dispute shall be determined by an affirmative vote of two members, and such decision shall bind all parties. However, the Board shall have no authority to obligate the parties in any manner whatsoever involving the expenditure of funds for purposes which have not been approved by the respective governing bodies of the parties prior to contracting any such obligation.

9. That the obligations of the parties hereto are to be determined from all the wording of this instrument and not just the wording contained in items one through eight hereof.

WITNESS our hands this the 20th day of December, 1959.

__________________________
HOUSTON COUNTY
BY: _______________________
GEORGE E. CLARK, COUNTY EXECUTIVE

__________________________
CITY OF TENNESSEE RIDGE, TENNESSEE
BY: _______________________
ROBERT BROWN, MAYOR

__________________________
CITY OF ERIN, TENNESSEE
BY: _______________________
BETSY LIGON, MAYOR

STATE OF TENNESSEE
COUNTY OF HOUSTON

Personally appeared before me, the undersigned, a Notary Public in and for said county and state aforesaid, George E. Clark, Robert Brown, and Betsy Ligon, with whom I am personally acquainted and who, upon oath, acknowledged themselves to be the Officials designated in this resolution and that they, as such officials, being authorized to so do execute the foregoing instruments for purposes therein contained by signing the name of their respective governmental agency, as such official.

__________________________
NOTARY PUBLIC

My commission expires:
6-5-91
Appendix E

Review by Appropriate Municipal or Regional Planning Commission

Not Applicable