

**DYER COUNTY
SOLID WASTE PLANNING REGION**

Solid Waste Needs Assessment Update

September 2014

As required by The Solid Waste Management Act (T.C.A. §68-211-811).



**TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Solid Waste Management
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INTRODUCTION

In an effort to coordinate and plan for safe, efficient solid waste disposal in the state, the Tennessee General Assembly enacted several pieces of legislation, which are compiled in Title 68, Chapter 211 of the *Tennessee Code Annotated*. To comply with the requirements of this chapter, all local governments must engage in specified planning and organizational activities (See the Solid Waste Management Act of 1991, T.C.A. §§ 68-211-801 through 68-211-874).

Regional Solid Waste Management Planning

To begin implementation of the Solid Waste Management Act, counties were instructed to form solid waste regions (single or multi-county) and establish a solid waste board. Each region was required to formulate a 10-year plan for collection and disposal of solid waste in the area and submit this plan to the Tennessee Department of Environment and Conservation. Each municipal solid waste region must submit an annual progress report and 5-Year Plan Update (T.C.A. § 68-211-814). The plan, and any revised plan, submitted by each region must be consistent with the state solid waste plan and with all relevant state laws and regulations.

At a minimum, each plan must contain the following items:

- Demographic information and projections;
- Analysis of economic activity in the Region;
- Characterization of the waste stream;
- Projection of solid waste generation;
- Evaluation of collection systems within the Region;
- Current system analysis of waste streams, collection capability, disposal capability, costs, and revenues;
- Description of waste reduction activities designed to attain the required 25 percent reduction in solid waste;
- Description of education initiatives designed to achieve the goals stated in the statute; and
- Any other information the commissioner of the Department of Environment and Conservation deems relevant.

In order that the regional planning effort is implemented on a solid foundation of relevant and objective knowledge of local conditions, the Act requires the Development Districts to coordinate, conduct and maintain a Needs Assessment for each solid waste region. This Assessment shall be revised every five years.

SECTION 1:

DEMOGRAPHIC INFORMATION AND PROJECTION

Provide a table and chart showing the region's population for the last ten (10) years with a projection for the next five (5) years. Provide a breakdown by sub-table and sub-chart, or some similar method to detail all county and municipality populations. Considering the trends, discuss the affect on the solid waste infrastructure needs over the next five (5) years.

Population Trends in Dyer County

Dyer County's population has increased between the 2000 U.S. Census and the 2010 U.S. Census. The population in 2000 was 37,279 and the 2010 population was 38,335. As shown in Table 1.1 below, the population projections for the next five years show slight increases.

TABLE 1.1 Historic and Projected Population Trends (2004 thru 2020)

Year	County Population	Dyersburg	Newbern	Trimble	Unincorporated
2004	37,918	17,267	3,032	718	16,901
2005	38,129	17,368	3,073	721	16,967
2006	38,290	17,310	3,098	723	17,159
2007	38,461	17,250	3,124	721	17,366
2008	38,649	17,267	3,132	725	17,525
2009	38,871	17,280	3,140	729	17,722
2010	38,335	17,145	3,313	637	17,243
2011	38,521	17,082	3,302	637	17,177
2012	38,686	17,100	3,305	637	17,200
2013	38,213	17,120	3,309	637	17,147
2014	38,645	17,140	3,310	637	17,558
2015	38,890	17,160	3,316	637	17,777
2016	39,306	17,170	3,318	637	18,181
2017	39,458	17,180	3,320	639	18,319
2018	39,607	17,190	3,322	639	18,456
2019	39,736	17,200	3,324	639	18,573
2020	39,872	17,212	3,326	639	18,695

Sources: Historic data and projections are based on data from the U.S. Census Bureau.

Based on the latest U. S. Census Bureau statistics, 16% of Dyer County's population is 65 years of age and older and 24.3% is under the age of 18. These figures account for more than 40% of Dyer County's total population.

If the population does increase in Dyer County, solid waste disposal by the residents should also increase accordingly. As funding allows, Dyer County has plans to open two more convenience centers. Funds are needed to purchase land for these centers.

Metals are collected at the convenience centers, and e-waste is collected at the Dyer County Building and Codes office. Dyer County hosts a Household Hazardous Waste

Day annually. Each year, the event is very successful. The county will continue to promote recycling and reuse to maintain the real-time waste diversion goal.

SECTION 2:

ECONOMIC ACTIVITY WITHIN THE REGION

Provide a table and chart showing the region's economic profile for the county and its municipalities for the last ten (10) years with a projection for the next five (5) years. This can be accomplished by using the following economic indicators:

- Taxable sales, property tax generation, and per capita income
- Evaluation by break down of each economic sector
- County or municipal budgeting information
- Other commonly accepted economic indicators

TABLE 2.1 Dyer County Historic and Projected Economic Indicators

Year	Total Employment	Unemployed	Unemployment Rate	Per Capita Income	Retail Sales
2004	17,780	1,070	6.0%	\$ 26,095	\$ 447,282,138
2005	17,430	1,070	6.1%	\$ 26,859	\$ 454,949,787
2006	17,650	1,020	5.8%	\$ 27,778	\$ 470,576,787
2007	17,310	890	5.2%	\$ 30,285	\$ 473,944,001
2008	17,610	1,330	7.6%	\$ 31,481	\$ 475,958,408
2009	17,490	2,460	14.1%	\$ 31,070	\$ 435,850,402
2010	17,450	2,200	12.6%	\$ 31,136	\$ 458,170,567
2011	17,370	2,290	13.2%	\$ 32,333	\$ 480,105,162
2012	17,200	2,020	11.7%	\$ 35,272	\$ 495,584,889
2013	16,850	1,890	11.2%	\$ 35,700	\$ 497,325,051
2014	16,770	1,550	9.2%	\$ 35,900	\$ 499,156,325
2015	16,880	1,600	9.5%	\$ 36,100	\$ 500,563,598
2016	17,000	1,550	9.1%	\$ 36,250	\$ 502,235,659
2017	17,100	1,600	9.4%	\$ 36,400	\$ 503,789,123
2018	17,200	1,600	9.3%	\$ 36,700	\$ 504,256,741
2019	17,250	1,650	9.6%	\$ 36,800	\$ 504,896,235
2020	17,300	1,650	9.5%	\$ 37,000	\$ 505,632,456

Sources: Historic employment data are from the Tennessee Department of Labor and Workforce Development, per capita income data is from the U. S. Bureau of Economic Analysis, and retail data is from the Tennessee Department of Revenue. All projections are by the NWTDD staff.

Economic Profile of Dyer County

As shown on Table 2.1, the Dyer County economy is weak when compared to the state and national averages. Unemployment rates have ranged from a low of 5.2% in 2007 to a high of 14.1% in 2009. Several industries in Dyer County and the surrounding area have closed during the past five years. Just recently, a few new industries have opened within the county.

As of July 2014, the unemployment rate in Dyer County was 9.2%. It is estimated that the unemployment rate basically will stay the same as industries close and new ones open. When the new Interstate 69 is built, the economy is expected to improve in the county.

The average total wages in all industries in Dyer County was \$34,060, which is significantly lower than the state average of \$44,077. The average industry wage is also less than the industry average in the nation of \$49,804.

SECTION 3:

SOLID WASTE STREAM CHARACTERIZATION

Elaborate on the region's solid waste stream. Compare the current waste stream with trend anticipated over the next five (5) years, and discuss how this new total will be handled. Include in this discussion how problem wastes like waste tires, used oil, latex paint, electronics and other problem wastes are currently handled and are projected to be handled in the next five (5) years. What other waste types generated in this region require special attention? Discuss disposal options and management of these waste streams as well as how these waste streams will be handled in the future. Include in this discussion how commercial or industrial wastes are managed. Also provide an analysis noting source and amounts of any wastes entering or leaving out of the region.

Current MSW Stream

Dyer County is one of three counties within the CDG Solid Waste Region. The other two counties are Crockett and Gibson. In the most recent CDG Solid Waste Annual Progress Report (2013), the total MSW stream for Dyer County was reported as 99,610 tons. This amount consisted of 32,168 tons disposed in Class I landfills, 6,279 tons being disposed of in III/IV landfills, and 61,163 tons being recycled, composted, or diverted by other means or methods.

TABLE 3.1 Regional Solid Waste Stream Disposal for 2014 – 2019

Class I Disposal Site	Reported Year (APR 2013)	Projected Year					
	2013	2014	2015	2016	2017	2018	2019
MSW disposed in NW TN Disposal Corp. Class I Landfill located in Obion County	7,505	7,550	7,600	7,650	7,650	7,700	7,750
MSW disposed in ECM of Ridgely Class I Landfill located in Obion County	4,299	4,350	4,400	4,450	4,500	4,550	4,600
MSW disposed in West Camden Class I Landfill located in Benton County	1,226	1,250	1,275	1,300	1,325	1,350	1,375
MSW disposed in Madison County Class I Landfill located in Madison County	24	25	26	27	28	29	30
MSW disposed in Dyersburg Municipal Class I Landfill located in Dyer County	19,114	19,500	20,000	20,500	21,000	21,500	22,000
Total Regional Waste Disposal	32,168	32,675	33,301	33,927	34,503	35,129	35,755

The five-year projections for waste disposal in Dyer County are provided in Table 3.1 above. These estimates are based on a slight annual increase to coincide with the population increases that were projected in Section 1 of this assessment.

Dyer County will continue to try and expand its current recycling programs at the convenience centers. Currently, the county offers cardboard, paper, and metals recycling

at the Dyer County Convenience Center only. Hopefully, recycling can be expanded to the other convenience centers. E-waste is collected at the Dyer County Building and Code office. The e-waste recycling is very successful.

Regional Solid Waste Management

Table 3.2 below describes how the region’s total waste stream is managed currently and how it will be managed in the next 5 years. Dyer County and its municipalities and the businesses are all listed separately.

TABLE 3.2 Waste Stream Management

Jurisdiction or Sector	Solid Waste Stream Collection	Solid Waste Disposal Options	Present Problem Waste Handling	Future Problem Waste Handling	Other Problem Waste Types
Dyer County	<p>Residential solid waste 3 County Convenience Centers Available to all residents of the County</p> <p>Local businesses Not permitted to use the convenience center</p>	Dyersburg Municipal Class I and Class III/IV Landfills located in Dyer County as primary waste disposal facility for residents of the unincorporated areas of Dyer County and local businesses	<p>Waste tires: Waste tire contract</p> <p>Used oil: Private Businesses</p> <p>Automobile fluids: Private Businesses</p> <p>Latex paint: HHW Event</p> <p>Electronics: Building & Code Office</p>	<p>Waste tires: Waste tire contract</p> <p>Used oil: Private Businesses</p> <p>Used oil filters: Private Businesses</p> <p>Automobile fluids: Private Businesses</p> <p>Latex paint: HHW Event</p> <p>Electronics: Warehouse</p>	HHW collected at mobile collection events. Due to limited statewide mobile collection site scheduling, no regional approach has been developed to handle HHW. A regional approach to handle HHW could be evaluated by the Northwest Development District. Planned program discussions can be scheduled in the near future.
Dyersburg	Solid waste curbside collection fee service for city residents.	Dyersburg Municipal Class I and Class III/IV Landfills located in Dyer County as primary waste disposal facility for unincorporated residents of Dyersburg and local businesses	Provided by Dyer County	Provided by Dyer County	Provided by Dyer County
Newbern	Solid waste curbside collection fee service for city residents.	<p>Northwest TN Disposal Corp., Inc. Class I Landfill located in Obion County as primary waste disposal facility for residents of Newbern and local businesses.</p> <p>Newbern Class III/IV Landfill for debris.</p>	Provided by Dyer County	Provided by Dyer County	Provided by Dyer County
Trimble	Solid waste curbside collection fee service for city residents.	Northwest TN Disposal Corp., Inc. Class I Landfill located in Obion County as primary waste disposal facility for residents of Trimble and local businesses.	Provided by Dyer County	Provided by Dyer County	Provided by Dyer County
Business	<p>Subscription service provided by:</p> <p>Contracts with private haulers, and direct haul by business.</p>	Dyersburg Municipal Class I and Class III/IV Landfills located in Dyer County as primary waste disposal facility for unincorporated residents of Dyersburg and local businesses	<p>Available service provided by:</p> <p>In-house business programs and Contractors</p>	<p>Available service provided by:</p> <p>In-house business programs and Contractors</p>	Hazardous waste generated from commercial and industrial businesses is regulated by TDEC, Division of Solid Waste Management, and Hazardous Waste Section.

Wastes Entering or Leaving the County

The City of Dyersburg owns and operates a Class I landfill as well as a Class III/IV landfill. A total of 31,044 tons of solid waste came into the two city landfills from six counties including Dyer County. Of the 31,044 tons, 24,747 tons were disposed in the Dyersburg Class I landfill, and 6,297 tons were disposed of in the Dyersburg Class III/IV landfill. Table 3.3 below indicates MSW was disbursed.

TABLE 3.3 Wastes Entering the Dyersburg Municipal Class I & Class III/IV Landfills

County	Class I Tonnage	Class III/IV Tonnage
Dyer County	19,744	6,279
Crockett County	2,721	18
Gibson County	2,010	0
Lauderdale County	69	0
Weakley County	4	0
Pemiscott County, MO	199	0
Totals	24,747	6,297

Source: John Damesworth, Dyersburg Solid Waste Management Superintendent

A total of 13,054 tons of solid waste was sent to four other Class I landfills. The table below illustrates where the MSW was sent out of county.

TABLE 3.4 Wastes Leaving Dyer County

Class I Landfill	County Location	Tonnage
West Camden Landfill	Benton County	1,226
Jackson-Madison County Landfill	Madison County	24
Northwest TN Disposal Corp., Inc.	Obion County	7,505
ECM of Ridgely	Obion County	4,299
Totals		13,054

Source: TDEC 2013 Solid Waste Origin Report

SECTION 4:

REGIONAL COLLECTION SYSTEMS

Describe in detail the waste collection system in the county and each municipality, including a narrative of the life cycle of solid waste from the moment it becomes waste (loses value) until it ceases to be a waste by becoming a useful product, residual landfill material or an emission to air or water. Label all major steps in this cycle noting all locations where wastes are collected, stored or processed along with the name of operators and transporters for these sites.

County and city governments throughout the United States are struggling to develop efficient and cost-effective plans for managing their MSW. Dyer County has started recycling various commodities and plans to continue to expand its programs.

Dyer County

Dyer County owns three convenience centers located throughout the county. The County provides personnel for the Dyer County Convenience Center and the Trimble Convenience Center. The City of Dyersburg is supposed to provide personnel at the Dyersburg City Landfill Convenience Center but has not for the past couple of years.

There is no charge for the residents of Dyer County to take their MSW to these convenience centers. The county budgeted \$129,465 to operate these convenience centers during FY2014.

The operating hours of the convenience centers are illustrated in the table below:

TABLE 4.1 Convenience Center Schedules

Convenience Center	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Dyer County CC		7 am – 10 am		7 am – 10 am	2 pm – 5 pm	9 am – 12 pm
City Landfill CC	7 am – 3:30 pm	7 am – 3:30 pm	7 am – 3:30 pm	7 am – 3:30 pm	7 am – 3:30 pm	
Trimble CC		7 am – 10 am		7 am – 10 am	2 pm – 5 pm	9 am – 12 pm

Only the Dyer County Convenience Center collects recyclables (paper and metals). E-waste is collected at the Dyer County Building and Codes Office.

Municipalities

Dyer County has three municipalities. The largest municipality is the City of Dyersburg. Dyersburg operates its own curbside collection system and transports the waste to the Municipal Landfill. The other two municipalities are Newbern and Trimble. Both of these municipalities contract with Barker Brothers, Inc. and the waste is transported to the Northwest Tennessee Disposal Corp. Inc. Landfill. There are no public recycling options offered by any of the municipalities.

The table below illustrates all locations where wastes are collected and stored along with the name of operators and transporters for these sites.

TABLE 4.2 Regional Collection Systems

Jurisdiction	Transporter	Class I Landfill
Dyer County	Waste Management, Inc.	Dyersburg Municipal Landfill
Dyersburg	City of Dyersburg	Dyersburg Municipal Landfill
Newbern	Barker Brothers, Inc.	Northwest TN Disposal Corp.
Trimble	Barker Brothers, Inc.	Northwest TN Disposal Corp.

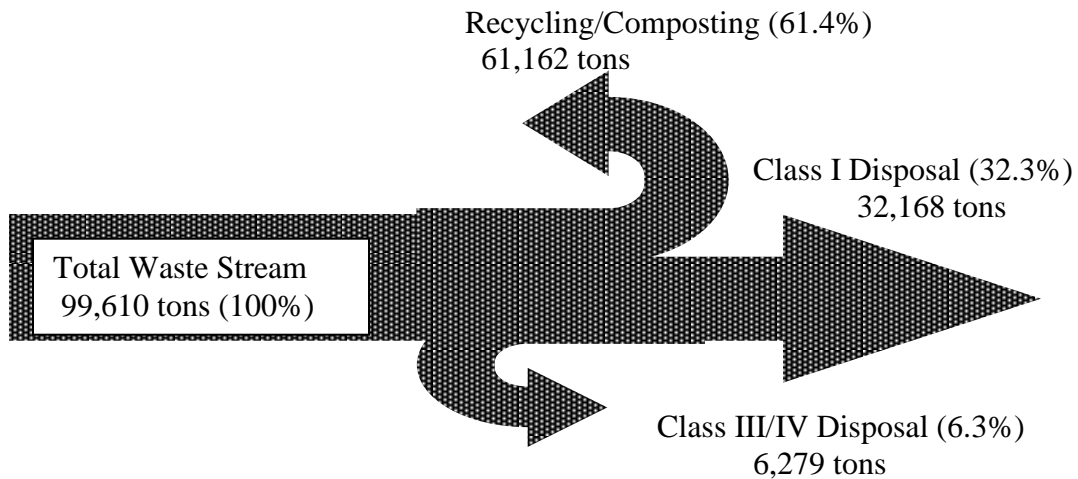
Dyer County recycles several different commodities. The table below illustrates these commodities and what processors are utilized.

TABLE 4.3 Dyer County Commodities and Processors

Commodities	Processor	Location
Cardboard	CDC Enterprises	Dyer, TN
Metals	Wright's Recycling	Gates, TN
Tires	Liberty Tire Recycling	Saltillo, MS
E-Waste	Scotts Recycling	Knoxville, TN

Flow Diagram of Dyer County Total Annual Regional Waste Stream

The figures shown in the flow diagram below were taken from the 2013 Dyer County Solid Waste Annual Progress Report.



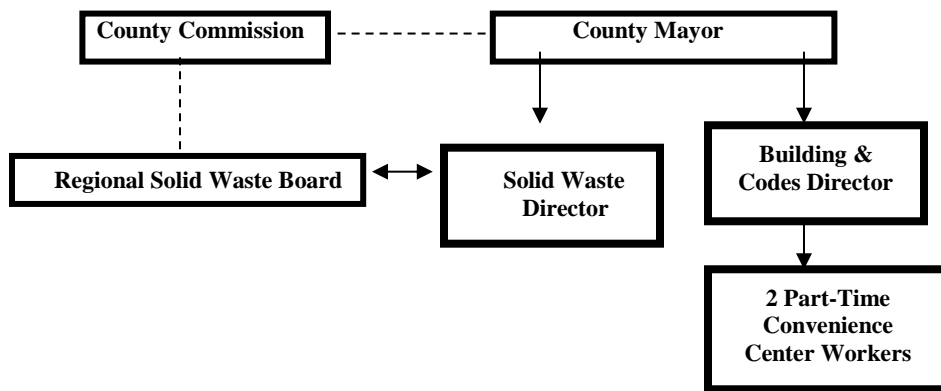
SECTION 5:

SOLID WASTE MANAGEMENT INFRASTRUCTURE

Provide organizational charts of each county and municipality’s solid waste program and staff arrangement. Identify needed positions, facilities, and equipment that a fully integrated solid waste system would have to provide at a full level of service. Provide a scale county level map indicating location of all existing facilities including convenience centers, transfer stations, recycling centers, waste tire drop-off sites, used oil collection sites, paint recycling centers, all landfills, etc. Identify any shortcomings in service and note what might be needed to fill this need.

Dyer County

An organizational chart is provided below for operations of the Dyer County Solid Waste Department.



Future Solid Waste Infrastructure Development Needs

The immediate needs in Dyer County are two more convenience centers to better serve the residents and reduce illegal dumping and a warehouse to store E-waste.

The table listed below provides a list of the future needs for Dyer County to continue to operate and expand an integrated solid waste management program. The costs listed below are estimates only and should be considered a baseline for future planning.

TABLE 5.1 Future Solid Waste Needs for...

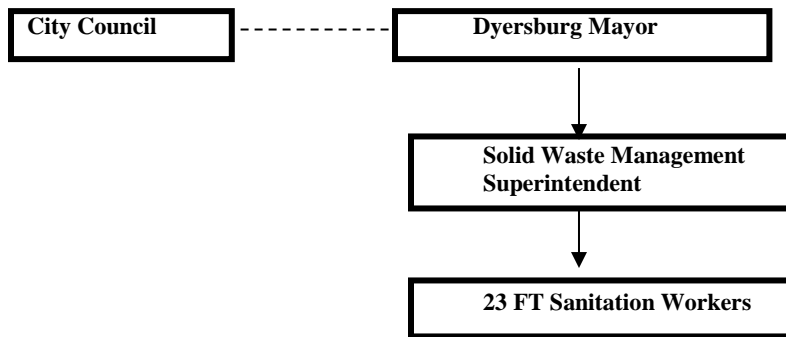
Need	Estimated Cost	Potential Revenue Source
Facility	\$ 200,000	Grants/General Fund
2 Additional Convenience Centers	80,000	Grants/General Fund
Storage Warehouse	80,000	Grants/General Fund
Pickup Truck	25,000	Grants/General Fund
Box Truck	60,000	Grants/General Fund
30 & 40 Yard Roll Off Containers	20,000	Grants/General Fund
Enclosed Ton Truck	60,000	Grants/General Fund
Enclosed Trailers	20,000	Grants/General Fund
16 Foot Trailers	5,000	Grants/General Fund
Goose Neck Dump Trailers	30,000	Grants/General Fund

Fork Lift	22,000	Grants/General Fund
Skid Steer	25,000	Grants/General Fund
Shredder	12,000	Grants/General Fund
Vertical Baler	12,000	Grants/General Fund
Horizontal Baler	75,000	Grants/General Fund
Conveyors	20,000	Grants/General Fund
Recycling Containers	20,000	Grants/General Fund
Carts and Bins	25,000	Grants/General Fund
Pallet Jack	5,000	Grants/General Fund
Roll Off Truck	120,000	Grants/General Fund
Compactor	12,000	Grants/General Fund
Portable Ramp	5,000	Grants/General Fund

Municipalities

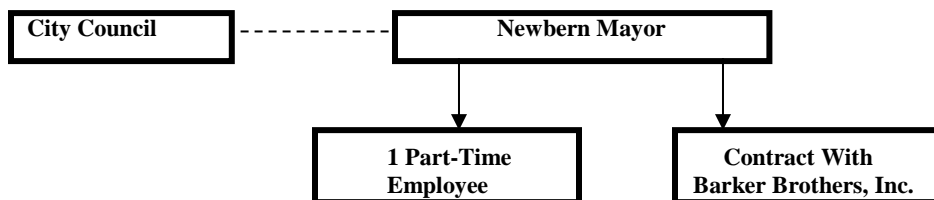
Dyersburg

The City of Dyersburg provides residential curbside collection and commercial subscription service for approximately 17,140 residents. The city does not provide recycling collection services but metals and tires are collected at the convenience center at the landfill. An organizational chart for the City of Dyersburg is provided below.



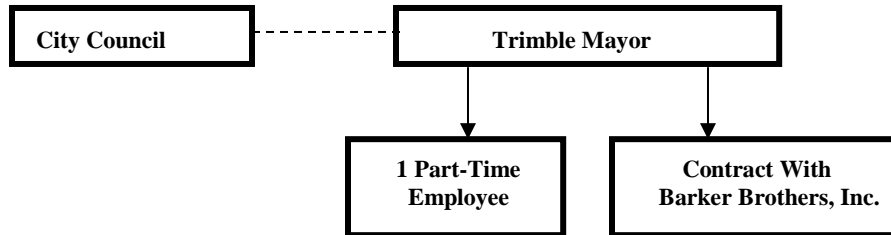
Newbern

The Town of Newbern provides residential curbside collection and commercial subscription service for approximately 3,310 customers. The city does not provide recycling collection services. An organizational chart for the Town of Newbern is provided below.



Trimble

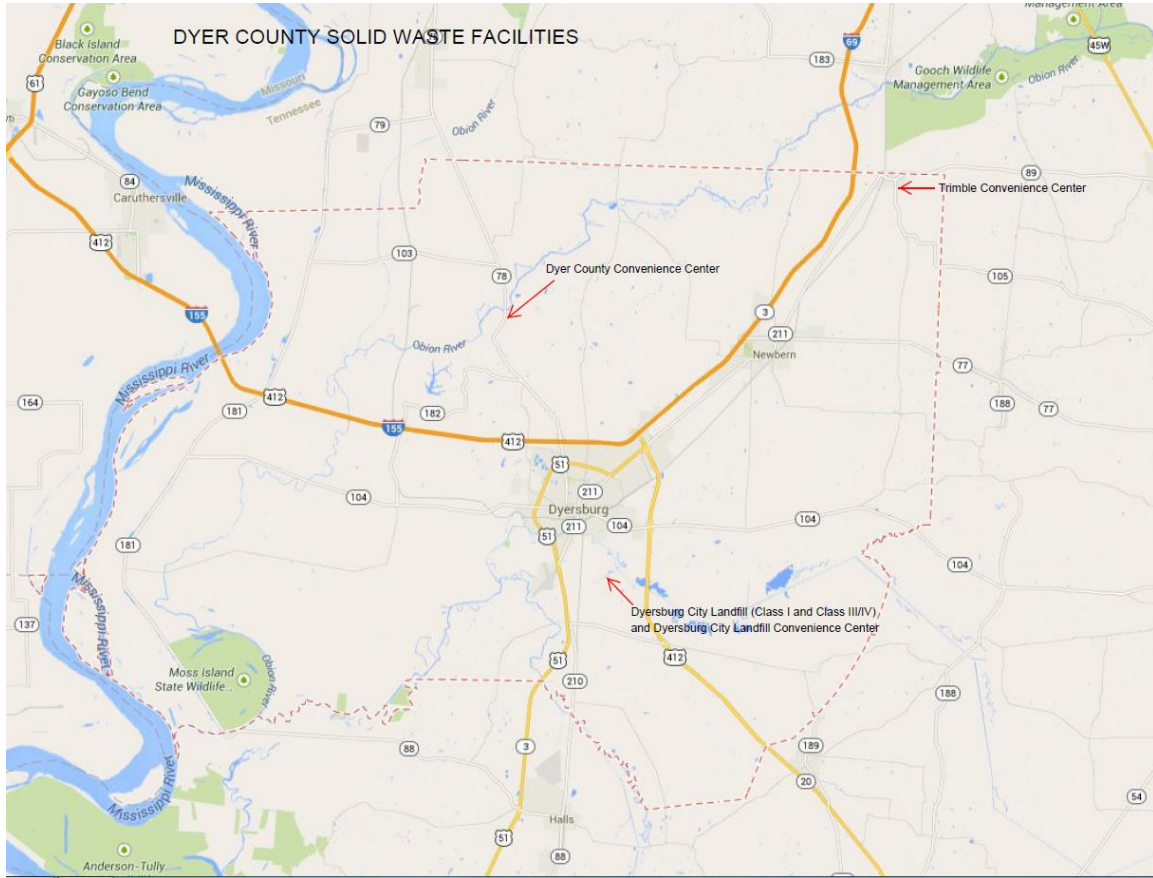
The Town of Trimble provides residential curbside collection and commercial subscription service for approximately 635 customers. The city does not provide recycling collection services. An organization chart for the Town of Trimble is provided below.



Locations of Solid Waste Facilities

A Dyer County map is provided on the following page with the locations all solid waste facilities in the county.

Dyer County Solid Waste Facilities



SECTION 6:

PUBLIC PARTICIPATION

Describe current attitudes of the region and its citizens towards recycling, waste diversion, and waste disposal in general. Where recycling is provided, discuss participation within the region. Indicate current and ongoing education measures to curb apathy or negative attitude towards waste reduction. Are additional measures needed to change citizen's behaviors? If so, what specific behaviors need to be targeted and by what means?

Current Attitudes Concerning Recycling, Waste Diversion, and Waste Disposal

Trends are continuing to improve through education on solid waste, recycling, and environmental issues. Industries are finding recycling a viable tool to reduce expenditures while meeting State and Federal environmental mandates. The CDG Solid Waste Director has been instrumental in keeping the public apprised on current issues. Dyer County provides educational materials to the schools and businesses.

The Household Hazardous Waste Day is a very successful event in Dyer County. It is heavily advertised for weeks prior to the event. The public turns out heavily for this event.

E-waste recycling was started in late 2008 and has continued to be a very successful endeavor. Currently, the e-waste is stored at the Dyer County Building and Codes Office. Due to heavy volumes of materials, the county needs to have another location that is larger to store this material. In 2013, the county collected nearly 13 tons of electronic waste.

Education Measures

Dyer County does an excellent job of educating the public about recycling and waste diversion. The county utilizes the Litter Grant to provide educational materials at various presentations to the schools and local organizations.

The table below illustrates the programs that were conducted in 2013.

TABLE 6.1 Public Education and Information Activities

Program Name	Sponsor	Effectiveness	Program Type	Target Group	# Served
Presentations	Litter Grant	Positive	Classroom and Community Outreach	Children/Teachers and Adults	1,200
Presentations about waste diversion and anti-littering were given in some of the schools in the area and various clubs and groups.					
Great American Cleanup and HHW Event	Litter Grant	Positive	Community Outreach	Adults	County-Wide
Several meetings were held throughout the year to plan both the Great American Cleanup and the HHW Event.					

SECTION 7:

REGIONAL SOLID WASTE REDUCTION GOAL

The Solid Waste Management Act of 1991 requires all regions to reduce the amount of waste going into Class I landfills by 25%. Amendments to the Act allow for consideration of economic growth, and a “qualitative” method in which the reduction rate is compared on a yearly basis with the amount of Class I disposal. Provide a table showing the reduction rate by each of these goal calculation methodologies. Discuss how the region made the goal by each methodology or why they did not. If the Region did not meet the 25% waste reduction goal, what steps or infrastructure improvements should be taken to attain the goal and to sustain this goal into the future.

TABLE 7.1 Measurement of Regional Waste Reduction Goal

County	Waste Reduction Goal Calculation Method			
	Compared to Base Year	Population Ratio	Economic-Population Ratio	Qualitative - Real Time
Dyer County	20%	24%	6%	63%
25% Waste Reduction Goal Achieved	No	No	No	Yes

Source: TDEC, Division of Solid Waste Management, Division of Solid Waste Assistance Program.

Variables Affecting Regional Waste Reduction Efforts

The main reason Dyer County cannot meet three of the four waste reduction goal calculation methods is because the base year figures are inaccurate. There are several reasons these figures are inaccurate.

1. Most existing disposal contracts in the 1990’s established fees based on cubic yards and reporting tonnage figures required estimating how many cubic yards of waste weighed a ton.
2. The landfill operators depend on the customer to accurately report the origin of the MSW. There was no system in place in 1995 to determine if the origin was accurate. Currently, the customer is still the first source of information for the landfill operators to initiate the reporting process to TDEC.

Dyer County did meet the Qualitative – Real Time Method of waste reduction by showing a real time diversion rate of 63%. Most of the recycling was completed by private entities but the county did divert more than 67,000 tons of materials from the Class I landfills. The CDG Solid Waste Director has been instrumental in helping Dyer County with its recycle program.

Future Regional Waste Reduction Program

Dyer County will continue to expand its recycling program. One way to expand the program will be to apply for available grants.

A Household Hazardous Waste Day is held every year in Dyersburg. Dyer County will continue to apply to the State to host these events. They have been very successful and beneficial to the county.

SECTION 8:**SOLID WASTE DISPOSAL CAPACITY**

Provide a chart indicating current collection and disposal capacity by facility site and the maximum capacity the current infrastructure can handle at maximum throughput. Provide this for both Class I and Class III/IV disposal and recycled materials. Identify and discuss any potential shortfalls in materials management capacity whether these are at the collection or processor level.

TABLE 8.1 10-Year Regional Disposal Assurance in Dyer County

Site Name(s)	Annual Tons Disposed by Dyer County*	Solid Waste Permit #	Current Disposal (daily throughput)	Maximum Disposal Capacity (daily throughput)	Projected Life of Facility
West Camden Sanitary Class I Landfill located in Benton County	1,226	SNL 03-0247	2,300 tons per day	5,000 tons per day	25+ years remaining life
Madison County Class I Landfill located in Madison County	24	SNL 57-0239	2,000 tons per day	4,000 tons per day	25+ years remaining life
NW Tennessee Disposal Corporation Class I Landfill located in Obion Co.	7,505	SNL 66-0143	2,200 tons per day	5,000 tons per day	25+ years remaining life
ECM of Ridgely Class I Landfill located in Obion County	4,299	SNL 66-0276	1,200 tons per day	4,000 tons per day	25+ years remaining life
Dyersburg Municipal Class I Landfill located in Dyer County	19,114	SNL 23-0218	170 tons per day	500 tons per day	25+ years remaining life
Dyersburg Municipal Class III/IV Landfill located in Dyer County	6,279	DML 23-0107	170 tons per day	500 tons per day	25+ years remaining life

Source: West Camden Landfill, Madison Co. Landfill, NW Tennessee Disposal Corp., Alan's Industrial Waste Landfill, Dyersburg Municipal Landfill, January 2014

*Note: Annual tonnage disposed includes Municipalities and Businesses

No potential shortfalls in materials management capacity at the collection or processor level are foreseen.

Provide a chart or other graphical representation showing public and private collection service provider area coverage within the county and municipalities. Include provider's name, area of service, frequency of collection, yearly tons collected, and the type of service provided.

TABLE 8.2 Public and Private Collection Service in Dyer County in 2013

Service Provider	Service Area*	Frequency of Service (Weekly, Bi-weekly, on call, etc.)	Estimated Average Annual Tons Collected	Type Service (Curbside, Convenience Center, Green Box)
Dyer County Unincorporated	County-wide Local business subscriptions	6 days per week (Drop Off)	14,380	3 Convenience Centers
Dyersburg	City residents Local business subscription	Weekly	14,345	Residential curbside Local business subscription
Newbern	City residents Local business subscription	Weekly	2,885	Residential curbside Local business subscription
Trimble	City residents Local business subscription	Weekly	558	Residential curbside Local business subscription
Total			32,168	

SECTION 9:**UNMET FINANCIAL NEEDS**

Complete the chart below and discuss unmet financial needs to maintain current level of service. Provide a cost summary for current year expenditures and projected increased costs for unmet needs.

TABLE 9.1 Expenditures and Revenues for Dyer County for 2013/14

EXPENDITURES			
Description	Present Need \$/year	Unmet Needs \$/year	Total Needs (Present + Unmet) \$/year
Salary and Benefits			
Transportation/hauling			
Collection and Disposal Systems			
Equipment			
Sites			
Convenience Center	\$ 129,465		\$ 129,465
Transfer Station			
Recycling Center			
MRF			
Landfills			
Site			
Operation			
Closure			
Post Closure Care			
Administration (supplies, communication costs, etc.)			
Education			
Public			
Continuing Ed.			
Capital Projects			
REVENUES			
Host agreement fee			
Tipping fees			
Property taxes			
Local option taxes	\$ 86,820		\$ 86,820
Surcharges			
Disposal Fees			
Collection charges			
Industrial or Commercial charges			
Residential charges			
Convenience Centers charges	\$ 7,000		\$ 7,000
Transfer Station charges			
Sale of Methane Gas			
Other sources: (Grants, bonds, interest, sales, etc.)	\$ 30,240	\$ 5,405	\$ 35,645

Dyer County expends almost \$130,000 to operate its three convenience centers. During FY14, the county transferred in \$5,405 from the general fund to balance the solid waste budget. Doing this every year is depleting the general fund. Also, the convenience centers and equipment are in need of renovation or repair. Without assistance from the state, the county cannot provide this needed maintenance. Two more convenience centers are needed in the county but there are not enough funds in the county's budget to purchase the land and construct the convenience centers. Again, funds are needed from

the state to assist the county. Dyer County contracts with Waste Management for waste disposal.

Municipalities

The City of Dyersburg owns and operates both a Class I landfill and a Class III/IV landfill. Dyersburg also operates its own curbside collection system within the city for approximately 17,140 residents. The citizens of Dyersburg pay a monthly fee for this service, and these funds are placed in the General Fund. If additional funds are needed, they are transferred from the General Fund to the Sanitation Department to operate the solid waste system. According to the Sanitation Department Superintendent, there are no unmet financial needs.

Newbern provides residential curbside collection and commercial subscription service for approximately 3,310 residents. The Town of Newbern charges the citizens a monthly fee for weekly waste collection and contracts with Barber Brothers, Inc. for waste disposal. The collection charges plus interest earnings equal the amount paid to the waste hauler. The Town of Newbern also operates a Class III/IV landfill for city use. One part-time employee works at the landfill 16 hours per week.

Trimble provides residential curbside collection and commercial subscription service for approximately 640 residents. One part-time employee works two days a week in the Sanitation Department. The Town of Trimble charges the citizens a monthly fee for weekly waste collection and contracts with Barber Brothers, Inc. for waste disposal. The collection charges equal the amount paid to the waste hauler.

SECTION 10:

CURRENT REVENUE SOURCES

Identify all current revenue sources by county and municipality that are used for materials and solid waste management. Project future revenue needs from these categories and discuss how this need will be met in the future.

Dyer County

The Dyer County Solid Waste Fund is funded with Local Utilities Taxes, Solid Waste Disposal Fees, Lease/Rentals, and Solid Waste Grants. The majority of the funding is transferred in from the General Fund, which is the county's primary operating fund. It accounts for all financial resources of the general government, except those that are required to be accounted for in another fund.

The revenue of the General Fund includes: Property Taxes, Local Option Sales Taxes, Other Local Taxes, Grants, and Contributions not restricted for specific programs, and Miscellaneous.

The only revenue sources for the county to utilize in these hard economic times are grants for solid waste management and/or waste diversion. Hopefully, if these grants are offered, Dyer County will continue to be able to implement a fully integrated solid waste program.

The county has plans to construct two new convenience centers to better serve the unincorporated areas. Funding is needed to purchase the necessary land and to construct the centers. Also, since the E-waste collection has been so successful, a warehouse needs to be purchased or constructed to be utilized for storage. Dyer County will be seeking grants for both of these endeavors. More funds are also needed for the maintenance of the current three convenience centers and solid waste equipment.

The Waste Tire Grant was discontinued on June 30, 2014. It is too early in the fiscal year to determine if the new process with the Department of Revenue will be beneficial.

Municipalities

The three municipalities collect fees from the residents that are equal or nearly equal to the costs of the collection and disposal services offered by the private contracted MSW haulers?. The rates will increase as needed to continue to pay for this service.

SECTION 11:

REGIONAL SOLID WASTE PLAN

Discuss this region’s plan for managing its solid waste management system during the next five (5) years. Identify any deficiencies and suggest recommendations to eliminate deficiencies and provide sustainability of the system for the next five (5) years. Show how the region’s plan supports the Statewide Solid Waste Management Plan.

The table below summarizes Dyer County’s existing programs, future programs, and the Tennessee Solid Waste Management Plan.

TABLE 11.1 Regional Solid Waste Management Plan

Solid Waste Program	Existing Solid Waste Programs	Future Solid Waste Programs	Tennessee Mandated Plan
Residential Solid Waste Collection	Dyer County has 3 convenience centers throughout the county.	Add 2 more convenience centers.	County to provide CCC’s for residents according to population or service area, maintain required design and operational standards.
Recycling	Dyer County offers recycling at all 3 convenience centers. Private recycling companies are also available.	Expand current recycling services.	County to provide at least one (1) drop-off site for collection of residential recyclable materials.
Waste Reduction	Dyer County met reduction goal by the Real-Time Method.	Continue to meet the 25% Waste Reduction Goal.	Region to achieve 25% Waste Reduction Goal.
Problem Waste Management	Dyer County collects electronics, waste tires, automobile fluids, and batteries at the Convenience Centers. Dyer County hosts a HHW collection event to collect paint.	Continue to collect electronics, waste tires, automobile fluids, and batteries at the Convenience Centers.	County to provide at least one (1) site to accept automobile fluids, batteries, and waste tires.
Public Education and Information	Dyer County provides educational activities to the schools and to the general public through the Litter Grant.	Continue to provide educational activities to the schools and the general public through the Litter Grant.	Region to develop and implement solid waste management action plan for adults and children.
Disposal	Dyer County contracts with Waste Management, Inc. to provide disposal services.	Continue to contract with a waste hauler to provide disposal services.	Region to assure 10-year disposal capacity.
Planning	The CDG Solid Waste Board meets as needed throughout the year to discuss solid waste issues. All reporting requirements are up to date.	Continue meetings throughout the year to discuss solid waste issues. Keep reporting requirements up to date.	Region to provide Annual Progress Reports, Needs Assessments, and other reporting requirements as needed.

Sustainability of the Solid Waste Plan must include, at the minimum:

- Continue the CDG Solid Waste Board involvement,
- Continue the activities of the Solid Waste Director,
- Continue the activities at the Convenience Centers,
- Add a CCC in FY _____ and then another one in FY _____?
- Continue to pursue all grant funds for equipment and facilities,
- Continue to utilize technical assistance providers,
- Continue to research technologies and other program options,
- Continue to promote waste reduction efforts, and
- Continue public outreach and educational programs

This list is neither inclusive nor listed in priority. Expansion and sustainability will depend on the economy and funding sources.

SOURCES

U. S. Census Bureau

Tennessee Department of Labor and Workforce Development

U. S. Bureau of Economic Analysis

Tennessee Department of Revenue

2013 CDG Annual Progress Report

TDEC 2013 Solid Waste Origin Report

Tommy Edmonds, CDG Solid Waste Director

John Damesworth, Solid Waste Management Superintendent

Daniel Cobb, Solid Waste Board Member/Building and Code Enforcer