

Draft Report

# Solid Waste Management Plan

# Dougherty County and City of Albany



February 2006



# R. W. BECK SOLID WASTE MANAGEMENT PLAN Dougherty County & City of Albany

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- Appendix G Landfill Capacity Assurance Letter

This report has been prepared for the use of the client for the specific purposes identified in the report. The conclusions, observations and recommendations contained herein attributed to R. W. Beck, Inc. (R. W. Beck) constitute the opinions of R. W. Beck. To the extent that statements, information and opinions provided by the client or others have been used in the preparation of this report, R. W. Beck has relied upon the same to be accurate, and for which no assurances are intended and no representations or warranties are made. R. W. Beck makes no certification and gives no assurances except as explicitly set forth in this report.

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# 1.1 Background

This Solid Waste Management Plan updates the original Dougherty County Solid Waste Management Plan, adopted in 1993, and the Five-Year Short-Term Work Program Update, adopted in 2003. This Plan was written to meet Chapter 110-4-3 of the rules of the Georgia Department of Community Affairs, Minimum Planning Standards and Procedures for Solid Waste Management, as revised in 2004. This solid waste management plan covers fiscal years 2007 through fiscal year 2016. It addresses the five core planning elements specified by the Minimum Planning Standards and Procedures, including:

- Waste Reduction;
- Collection;
- Disposal;
- Land Limitation; and
- Education and Public Involvement.

In addition, the Plan includes a waste disposal stream analysis and an implementation strategy.

R. W. Beck, Inc. facilitated the development of this plan with the assistance of the Dougherty County Solid Waste Department (County) and the City of Albany Public Works Department/Solid Waste Division (City). Keep Albany-Dougherty Beautiful (KADB) also contributed to the development of the plan.

# 1.2 Person Responsible for the Plan

The person responsible for the updated Dougherty County Solid Waste Management Plan is:

Michael McCoy Dougherty County Solid Waste Department 900 Gaissert Road Albany, Georgia 31705 (229) 420-1138 (229) 420-1053 <u>mmccoy@dougherty.ga.us</u>



Any questions regarding the Plan or requests for additional information can be directed to Mr. McCoy.

# **1.3 Planning Area Defined**

This Solid Waste Management Plan covers all of Dougherty County including the City of Albany, the County's only incorporated municipality.

Dougherty County covers an area of 330 square miles. The location of Dougherty County in the State of Georgia is shown in Figure 1-1.



Figure 1-1: Dougherty County

### 1.3.1 Topography/Unique Natural Features

The Flint River is the primary water feature in the County. As part of the Lower Flint River Basin, the river flows south through Albany before emptying into Lake Seminole near the border of Georgia, Alabama, and Florida.

### 1.3.2 Population

The total population of Dougherty County was 96,127 in 2000 according to the County's Planning Department. The City of Albany's 2000 population was 76,939 per the U.S. Census Bureau, or 80 percent of the County's total.

The County population estimate for 2005, based on the Dougherty County Comprehensive Plan, was 97,201. For purposes of this Solid Waste Management Plan, demographic data provided in the Comprehensive Plan will be used.

Table 1-1 shows the projected Dougherty County population for the 10-year planning period, as reported by the County's Planning Department. The population is expected to increase by 2.7 percent in the next 10 years. The Planning Department does not have population projections for the City of Albany. The City's population projections in Table 1-1 were calculated by subtracting the U.S. Census Bureau's 2000 City population figure of 76,939 from the Planning Department's 2000 County population of 96,127, and maintaining the assumption that 80 percent of the County's population will reside in the City throughout the planning period.

Population Projections for Dougherty County, Georgia					
Planning Area	Year 2000	Year 2005	Year 2010	Year 2015	Projected % Change 2005 - 2015
Dougherty County <sup>1</sup>	96,127	97,201	98,372	99,801	2.7%
City of Albany	76,939 <sup>2</sup>	77,761	78,698	79,841	2.7%

Table 1-1 Population Projections for Dougherty County, Georgia

<sup>1</sup> Source: Dougherty County Planning Department.

<sup>2</sup> Source: U.S. Census Bureau, 2000 census.

The total number of households in the County in 2000 was 39,656 and the average household size was 2.58 people. The total number of households in the City of Albany in 2000 was 32,062 and the average household size was 2.54, per the U.S. Census Bureau. The City reported 36,400 households in 2005.

### 1.3.3 Economic Activity

In 2004 the total employed labor force in the County was 41,504.<sup>1</sup> Of that amount, 32,725 persons were employed within the City of Albany. The County has a strong industrial base, along with a good mix of commercial establishments, most of which are located in the City of Albany. Some of the major local industries include Proctor and Gamble, Cooper Tire, Merck, and Miller Brewing.

Table 1-2 shows the breakdown, by employment category, for Dougherty County in 2000, according to the U.S. Census Bureau.

<sup>&</sup>lt;sup>1</sup> Source: Demographic profile from the Albany-Dougherty County Georgia website: <u>http://www.albany.ga.us/our\_community.htm</u>

Employment Category	2000 Number	Percentage	
Agriculture, forestry, fishing & hunting, mining	387	1.0%	
Construction	2,473	6.6%	
Manufacturing	5,328	14.2%	
Wholesale Trade	1,301	3.5%	
Retail Trade	4,444	11.9%	
Transportation and warehousing, & utilities	1,524	4.1%	
Information	931	2.5%	
Finance, insurance, real estate	1,794	4.8%	
Professional, scientific, management, administrative	2,496	6.7%	
Educational, health & social services	8,590	23.0%	
Arts, entertainment, recreation, accommodation & food services	2,832	7.6%	
Other services	2,248	6.0%	
Public administration	3,044	8.1%	
TOTAL	37,392	100.0%	

Table 1-2
Employment Percentages by Sector in Dougherty County <sup>1</sup>

<sup>1</sup> Source: U.S. Census Bureau.

# 1.4 Public Involvement During the Planning Process

Dougherty County adhered to the Minimum Planning Standards requirement for holding two Public Hearings and advertising public notification for the Solid Waste Management Plan. The County held the initial public hearing on November 3, 2005 to obtain public input prior to the planning process. The County then held the final public hearing on February 28, 2006 to obtain public comment on the draft Plan.

# 2.1 Amount of Waste Disposed

Reports from landfills submitted to the Georgia Department of Natural Resources Environmental Protection Division (EPD) indicate that 123,648 tons of solid waste was disposed in MSW landfills in 2004 from Dougherty County. Roughly 77 percent of this waste was disposed of at the County landfill. EPD records indicate that 28,991 tons was disposed in construction and demolition (C&D) landfills from Dougherty County. All of this C&D waste was disposed at the County landfill. Table 2-1 estimates the amount of this waste disposed by sector, based on a telephone survey of landfills in the state of Georgia conducted by R.W. Beck, Inc.<sup>1</sup> This telephone survey indicated that, of the waste delivered to MSW landfills, 66.6 percent is reported as MSW (generated by the commercial or residential sector), 12.3 percent is C&D debris, 14.0 percent is industrial, and 7.1 percent is sludge or biosolids.

Table 2-1
Reported Waste Disposed by Sector
Dougherty County
2004

Sector	Tons to MSW Landfill	Tons to C&D Landfill	Total Tons
MSW	82,349		82,349
C&D	15,209	28,991	44,200
Industrial	17,311		17,311
Sludge and Biosolids	8,779		8,779
TOTAL	123,648	28,991	152,639

2004 EPD Municipal Solid Waste Landfill Reported Tonnage Data for Dougherty County Georgia Waste Characterization Study, conducted for the DCA by R.W. Beck, Inc, 2004

Figure 2-1 shows the amount disposed in MSW and C&D landfills from Dougherty County and the tons disposed in the Dougherty County landfill for each year from 2000 through 2004. As Figure 2-1 indicates, the amount of waste being disposed out-of-County has increased in recent years.

<sup>&</sup>lt;sup>1</sup> R.W. Beck, Inc., Non-MSW Survey Results, conducted for the DCA, June 2002.



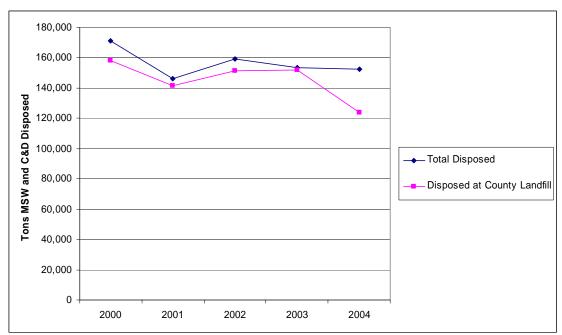


Figure 2-1 Disposed Waste Generated and Portion Disposed In Dougherty County 2000 through 2004

Source: EPD Municipal Solid Waste Landfill Reported Tonnage Data for Dougherty County

### 2.1.1 Unique Conditions and/or Seasonal Variations

The County does not have any unique conditions that would impact the waste stream. It does not experience any significant seasonal changes in population. The seasons do bring a variation in yard trimmings, with leaves in October and November and grass clippings and other yard waste in the spring and summer months. Construction and demolition activity varies considerably from year-to-year, depending on projects such as new building projects, flood and storm recovery, interest rates, etc.

### 2.1.2 Waste-Generating Disasters

Without knowing the type and degree of the unanticipated disasters, Dougherty County can not project the additional amount of waste that would require management for such an incident. However, a lesson can be taken from 1994 when flooding in the City of Albany and Dougherty County contributed 4,600 tons of waste to the disposal stream. Based on experience elsewhere, it is clear that a major disaster could result in many times more waste to be disposed than in an average year. The sections on collection and disposal outline the approach that the County would take to deal with waste resulting from disasters.

# 2.2 Disposal Rate

Table 2-2 shows that based on the reported tonnage of 123,648 tons disposed from Dougherty County in MSW landfills, the average resident of the County generates 6.99 pounds per day of waste disposed in MSW landfills. The average amount of waste disposed in a C&D landfill was 1.64 pounds per person per day in 2004.

Table 2-2
<b>Disposal Rates in Dougherty County</b>
2004

Disposal Facility Type	Tons Disposed	Population <sup>1</sup>	Pounds Per Person Per Day
MSW	123,648	96,985	6.99
C&D	28,991	96,985	1.64
Total	152,639	96,985	8.63

Source: 2004 EPD Municipal Solid Waste Landfill Reported Tonnage Data for Dougherty County

<sup>1</sup> Based on Interpolation of Population Projections from Dougherty County Planning Department

### 2.2.1 Reduction in Disposal Rate

The 1993 Dougherty County Solid Waste Management Plan indicates that in 1992, the population was 99,664 and 109,142 tons were disposed in the County landfill. This results in a disposal rate of 6.00 pounds per person per day. In 2004, the disposal rate in all MSW landfills was 6.99 pounds per person per day. This is an increase of 16.5 percent (see Table 2-3). In 1992, however, only waste disposed at the Dougherty County landfill was counted since landfills were not yet reporting the amount and source of their tonnage to EPD. The Dougherty County waste that was disposed elsewhere was not included in 1992. If only the amount of waste disposed in the Dougherty County landfill in 2004 is considered, as in 1992, then the disposal rate is 5.2 pounds per person per day, a 13.3 percent decline from 1992. In conclusion, because of the shortcomings of data available in 1992, it is difficult to determine the change in the disposal rate in MSW landfills between 1992 and 2004.

	MSW Landfill D 1992 and	•	
	Disposed in Dougherty County Landfill 1992	Disposed in Dougherty County Landfill 2004	Disposed in All MSW Landfills 2004
Total Tons	109,142	94,585	123,648
Population	99,664	99,664	96,986
Tons Per Capita Per Year	1.10	.95	1.27
Lbs. Per Capita Per Day	6.00	5.20	6.99

Table 2-3
MSW Landfill Disposal Rate
1992 and 2004

Data Source: 1993 County Plan, Weston, Inc., and EPD Data for 2004

# 2.3 Waste Characterization

The 2005 Statewide Waste Characterization Study contains a model that calculates the waste composition for a County based on demographics, recycling programs, and other factors specific to the community. Table 2-4 shows the waste composition for Dougherty County and tons per year of each material estimated to be disposed. This is based on the MSW component (residential and commercial waste) entering MSW landfills only. Regional results suggest that nearly 25 percent of the residential and commercial waste disposed of in Dougherty County is recyclable paper, and an additional 29 percent is organic material. Newspaper, corrugated containers, and food waste alone comprise an estimated 26 percent of the MSW disposed from Dougherty County.

Table 2-4 Waste Composition Characterization of MSW Disposed in the Southwestern Region

Material	Average Portion of Waste Stream	Tons per Year Disposed
Newspaper	6.58%	5,418.56
Corrugated Cardboard	7.91%	6,513.81
Office Paper	3.41%	2,808.10
Magazine/Glossy	1.82%	1,498.75
Paperboard	2.43%	2,001.08
Mixed (Other Recyclable)	2.69%	2,215.19
Other (Non-recyclable)	12.55%	10,334.80
Total Paper	37.39%	30,790.29
#1 PET Bottles	1.52%	1,251.70
#2 HDPE Bottles	0.89%	732.91
#3-#7 Bottles	0.06%	49.41

Material	Average Portion of Waste Stream	Tons per Year Disposed
Expanded Polystyrene	1.54%	1,268.17
Film Plastic	7.02%	5,780.90
Other Rigid Plastic	5.86%	4,825.65
Total Plastic	16.88%	13,900.51
Clear	1.61%	1,325.82
Green	0.31%	255.28
Amber	1.26%	1,037.60
Other	0.41%	337.63
Total Glass	3.59%	2,956.33
Steel Cans	0.98%	807.02
Other Ferrous	3.44%	2,832.81
Other Non-Ferrous	0.82%	675.26
Total Metal	5.25%	4,323.32
Yard Waste	3.30%	2,717.52
Wood (non-C&D)	2.51%	2,066.96
Food Waste	11.61%	9,560.72
Textiles	5.46%	4,496.26
Diapers	3.35%	2,758.69
Fines	2.12%	1,745.80
Other Organics	0.87%	716.44
Total Organic	29.22%	24,062.38
Drywall	0.20%	164.70
Wood	3.27%	2,692.81
Inerts	0.62%	510.56
Carpet	1.99%	1,638.75
Other C&D	0.40%	329.40
Total C&D	6.48%	5,336.22
Computers	0.15%	123.52
Other Electronics	0.41%	337.63
Tires	0.00%	0.00
HHW	0.14%	115.29
Other Inorganics	0.50%	411.75
Total Inorganics	1.20%	988.19
TOTAL <sup>1</sup>	100.00%	82,349.00

Georgia Waste Characterization Study, conducted for the DCA by R.W. Beck, Inc, 2005 <sup>1</sup> Total may not equal actual tons disposed exactly, due to rounding.

# 2.4 Projection of Waste to Be Disposed

As described in Section 2.2, it is estimated that 6.99 pounds per capita per day was disposed in MSW landfills by Dougherty County citizens in 2004, and 1.64 pounds per person per day was disposed in C&D landfills. If the per-capita disposal rate remains the same over the next 10 years, it is estimated that a total of 1.26 million tons will be disposed in MSW landfills and 295,614 tons in C&D landfills between 2007 and 2016. In Section 3, the County sets a waste reduction goal of reducing by 3 percent per capita the amount disposed in an MSW landfill over the ten year planning period. If this goal is achieved, then a total of 1.24 million tons will be disposed in each year is shown in Table 2-5.

Year	MSW at Current Disposal Rates	MSW with 3% Reduction	C&D
2007	124,444	124,444	29,215
2008	124,742	124,401	29,285
2009	125,041	124,281	29,355
2010	125,339	124,159	29,425
2011	125,703	124,099	29,510
2012	126,067	124,038	29,596
2013	126,431	123,974	29,681
2014	126,796	123,907	29,767
2015	127,160	123,839	29,852
2016	127,484	123,728	29,928
Total	1,259,207	1,240,870	295,614

# 3.1 Inventory and Assessment of Waste Reduction Programs

### 3.1.1 Source Reduction Programs

Source reduction is primarily encouraged through public education programs, primarily operated by the Keep Albany-Dougherty Beautiful (KADB). Dougherty County's Solid Waste enterprise fund provided \$181,714 in FY 2006 to KADB. KADB promotes source reduction through a number of media campaigns, workshops, events, and school programs, and also receives underwriting for projects from corporate partners. Solid waste education programs are described in more detail in Section 7. Through KADB programs and independently, local businesses and industries have implemented programs to reduce the amount of waste they generate.

KADB also promotes source reduction of household hazardous waste (HHW) by educating consumers about the proper way to manage paints. There is, however, no HHW collection program in the County.

The County reduces yard trimmings destined for disposal by promoting home composting. It has maintained a composting demonstration site, which was established in 1992 using a state grant. The demonstration, located at The Parks at Chehaw, draw approximately 25,000 visitors each year. Currently The Parks at Chehaw is undergoing renovations and the site is temporarily dismantled. It is expected that the renovations will be complete in mid-2007, at which time the demonstration site will again be functioning.

### 3.1.2 Recycling Programs and Facilities

The City of Albany and KADB jointly offer citizens three staffed recycling drop-off sites. The City provides staff and locations, while KADB provides education and outreach. These sites are located at:

- West Albany 2521 Meredyth Drive (at fire station #6);
- Downtown Albany Front Street (Behind Civic Center); and
- East Albany 210 Thornton Drive (Thornton Community Center).



These sites provide residents with the opportunity to recycle the following materials:

- Newspaper;
- Cardboard;
- Magazines;
- Aluminum cans;
- Plastic bottles (#1 and #2);
- Glass (brown, green, and clear); and
- Nickel-cadmium (Ni-Cd) batteries.

City employees staff these drop-off sites. The City supplements with community service workers when possible. Also, City employees collect the materials and deliver them to Southeastern Aluminum Recycling, Inc. in Albany, at least twice per week. KADB also collects newspaper and aluminum for recycling at schools.

In addition to the three City/KADB sites, there is a drop-off site for plastics, paper, cardboard, and aluminum cans at the Dougherty County landfill that can be used by businesses and residents. County employees deliver the materials collected at this site to Southeastern Aluminum Recycling, Inc.

The County also collects recyclable materials (cardboard, mixed paper, aluminum, glass, and plastic) from City and County offices. The following offices participate in the program:

#### **City Offices**

- Mayor's Office
- Municipal Court
- Dept. of Human Resources
- Attorney's Office
- Accounting Dept.
- Budget Analysis
- Central Services
- City Manager's Office
- City Clerk's Office
- Civic Center
- Code Enforcement Office
- Communications Office
- Community and Economic Dev. Office
- Dept. of Information and Technology

- Engineering Department
- Finance Department
- Fire Department Human Resources Office
- James H. Gray Sr. Civic Center
- Information and Technology
- Inspection Office
- Parks and Recreation
- Planning and Development Services
- Police Dept.
- Printing Division
- Procurement Office
- Public Works
- Solid Waste Division
- Traffic and Engineering Office
- Transit System
- Workers Compensation

#### County Offices

- Indigent Defense Office
- Small and Disadvantaged Business Office
- Administrative Offices
- Automotive Shop
- Clerk of Court
- County Commissioners
- Coroner's Office
- Department of Human Resources
- District Attorney's Office
- Elections Office
- Environmental Health Dept.

- Facilities Management
- Juvenile Court
- Law Library
- Magistrate Court
- Police Dept.
- Planning/Community Development Office
- Public Works
- Sheriff's Office and Jail
- State Court
- Superior Court
- Tag Office
- Tax Office
- Voter Registration

There is no curbside recycling in the City of Albany or in unincorporated Dougherty County.

The Marine Corps Logistics Base (MCLB) located in Albany has two drop-off recycling sites for residents and employees. Recyclable materials are also collected from residential buildings and office buildings as well as the vehicle maintenance building on a weekly basis. Recyclable materials collected include:

- PET (#1) and HDPE (#2) plastic bottles and jugs (excluding detergent bottles and white milk jugs);
- Aluminum cans;
- White bond paper;
- Magazines;
- Newspaper;
- Cardboard; and
- Glass containers (brown, clear and green).

Aluminum cans and glass are crushed on base, and cardboard is baled. The materials are delivered to Southeastern Aluminum Recycling, Inc. in Albany. Table 3-1 shows the tons of recyclable materials collected in the County through the various programs in FY 2004 and FY 2005.

#### Table 3-1 Tons of Recyclable Materials Collected FY 2004 and FY 2005

		FY 2004			FY 2005	
Material Type	KADB/City Drop- Offs and Other KADB Programs	Other City and County Programs	Marine Corps Logistics Base	KADB/City Drop- Offs and Other KADB Programs	Other City and County Programs	Marine Corps Logistics Base
Plastic Bottles (#1 and #2 combined)	3.8	NA	0.7	12.0	NA	1.9
Magazines	38.0	NA	NA	22.0	NA	NA
Newspaper	295.0	NA	32.6	340.0	NA	40.2
Glass	NA	NA	0.4	71.0	0.01 <sup>1</sup>	0.8
Mixed Paper	NA	20.0 <sup>1</sup>	26.0	NA	15.52 <sup>1</sup>	87.7
Cardboard	25.6	<b>19</b> .4 <sup>1</sup>	178.3	28.0	14.57 <sup>1</sup>	250.0
Aluminum <sup>2</sup>	5.8	14.6 <sup>1</sup>	0.3	5.6	0.04 <sup>1</sup>	0.9
Electronics	NA	NA	NA	42.0	NA	NA
White Goods –County	NA	118.0	NA	NA	106.0	NA
White Goods – City	NA	809.7	NA	NA	495.0	NA
Telephone Books	14.0	NA	NA	NA <sup>2</sup>	NA	NA
Total Tons Recycled by Program Category	382.2	981.7	238.3	520.6	631.1	381.55
Total Tons Recycled Countywide		1,602.2			1,533.2	

<sup>1</sup> Includes recyclable materials from drop-off at Dougherty County Landfill and from County and City offices.
 <sup>2</sup> Tonnage figure not available for FY 2005, as trailer was only 1/3 full, therefore was shipped with other materials.

In addition to the materials recovered that are indicated in Table 3-1, KADB collected 1,615 Christmas trees in FY 2005, which were ground into mulch for erosion control at the YMCA. In FY 2004 KADB also collected 3,758 pounds of textiles, which were donated to Goodwill Industries. KADB has not conducted this collection event again, as Goodwill's headquarters moved to Columbus, GA.

KADB also has a "Recycling in the Workplace" campaign, which resulted in 172 business and industry leaders signing a KADB form pledging that their business would recycle for the next 12 months. Generally these workplaces are served by private haulers, thus the tonnages they recycle is unknown.

Table 3-2 summarizes the recycling programs in Dougherty County.

Table 3-2
Recycling Programs in Dougherty County

Type of Program	Population Served	Owned and Operated by	Materials Accepted
West Albany Drop-Off Site (2521 Meredyth Drive at fire station #6)	Open to entire County Hours: M-Fri 8:30-11:30 AM, 12:30 – 5:30 PM, and Sat 8:00 AM – 6:00 PM.	Owned and Operated by City of Albany, with education and outreach provided by KADB	Newspaper, cardboard, magazines, aluminum cans, plastic bottles (#1 and #2), glass (brown, green, and clear), and Ni-Cd batteries
Downtown Albany Drop-Off Site – Front Street (Behind Civic Center)	Open to entire County Hours: Tues, Thursday 8:30-11:30 AM, 12:30 – 5:30 PM, and Sat 8:00 AM – 6:00 PM.	Owned and Operated by City of Albany, with education and outreach provided by KADB	Newspaper, cardboard, magazines, aluminum cans, plastic bottles (#1 and #2), glass (brown, green, and clear), and Ni-Cd batteries
East Albany Drop-Off Site – 210 Thornton Drive (Thornton Community Center)	Open to entire County Hours: Wed 8:30 AM – 11:30 AM and 12:30 PM – 5:30 PM, Sat 8:00 AM – 6:00 PM.	Owned and Operated by City of Albany, with education and outreach provided by KADB	Newspaper, cardboard, magazines, aluminum cans, plastic bottles (#1 and #2), glass (brown, green, and clear), and Ni-Cd batteries
County Landfill Drop-Off Site	Open to entire County	County	Paper, cardboard, aluminum, plastic.
School Newspaper Recycling Program	Students and families/neighbors of participating elementary schools throughout County	Operated by KADB and Southeast Paper Co.	Newspaper
School Aluminum Can Recycling Program	Students, faculty, and family/neighbors of participating elementary schools	KADB and Dougherty County Schools (benefits Habitat for Humanity)	Aluminum cans
School Telephone Book Recycling Program	Students, faculty, and family/neighbors of participating elementary schools	KADB and Dougherty County Schools	Telephone books

Type of Program	Population Served	Owned and Operated by	Materials Accepted
White Goods Recycling	City – collection, entire County can deliver to landfill	City, County, and private recycler	White goods
Electronic Waste	Entire County (residents and businesses)	KADB	Electronic devices
Marine Corps Logistics Base	On-base employees and residents	U.S. Marine Corps	Plastic bottles and jugs #1 and #2 (excluding detergent bottles and white milk jugs); aluminum cans, white bond paper, newspaper, magazines, glass containers, and cardboard.

Source: KADB, County, City, and Marine Corps Logistics Base telephone interviews and printed materials from KADB.

Table 3-3 lists the markets available in Dougherty County for recovered materials according to the Georgia Recycling Markets Directory. However, many recyclable materials generated in the County are ultimately sent to markets located outside of the County. Markets for most materials are plentiful in Georgia although since they are not usually located in the southwestern part of the State, the economics of accessing these markets varies by material.

Most recyclable materials generated in the County are delivered to Southeastern Aluminum Recycling in Albany. Southeastern Aluminum also has a buyback center where citizens can deliver recyclable materials and receive some revenue. In addition, they operate a commercial cardboard recycling program. Southeastern Aluminum Recycling has a revenue-sharing arrangement with KADB for the materials delivered through KADB-affiliated programs. End markets for most products delivered to Southeastern Aluminum Recycling are in Atlanta, Augusta, and Jacksonville, Florida.

Glass collected at the County drop-off sites is collected by Southeastern Aluminum Recycling, Inc. and delivered to Strategic Materials, Inc. in Atlanta where it is processed and marketed to end-users.

		-
Company Name	Company Location	Materials
Albany Pallet Exchange	1511 Rodgers St. Albany, Georgia 31726 (800) 763-6487	Wood pallets
	www.albanypallet.com	
Albany Recycling Services, Inc.	1301 E. Gordon Ave. Albany, Georgia 31702 (229) 432-6255	Ferrous metals, steel cans, metal appliances, autos, non- ferrous metals, aluminum cans
Southeastern Aluminum Recycling, Inc.	122 Broadway St. Albany, Georgia 31705 (229) 888-1713	Non-ferrous metals, aluminum cans, paper, newspaper, other paper, PET plastics, HDPE, office paper, cardboard
Thompson Tire Service, Inc.	200 East Oglethorpe Blvd. Albany, Georgia 31705 (229) 435-7753	Scrap tires, rubber

 Table 3-3

 Businesses in Dougherty County that Accept Recyclable Materials

Source: 2005 Georgia Recycling Markets Directory, DCA Web site.

### 3.1.3 Yard Trimmings Programs and Facilities

Currently there is no recycling/composting of yard trimmings sponsored by the City or the County. All residential yard trimmings are collected separately from MSW in both the City and the County. Yard trimmings collected from City residents are brought to the City's Maple Street inert site where the material is disposed. Yard trimmings collected from residents in the unincorporated areas of the County are brought to the County Landfill where the material is disposed in unlined space separate from MSW. Landscapers, commercial businesses, and residents may also deliver yard trimmings to the County Landfill. The City recently purchased a tub grinder which will be used to process all yard trimmings and Christmas trees. The mulch will be used locally by municipal government and residents. The City is also in discussions with local industries to accept the mulch generated by the City.

### 3.1.4 Special Materials Recycling

#### 3.1.4.1 Electronics

KADB offered an electronics recycling collection event for all County residents in September 2005, at the parking lot behind the Civic Center in Albany. This was the first such event offered, however KADB hopes to make this an annual event. Types of items accepted included computers, peripherals, VCR's, televisions, stereos, etc. Items NOT accepted included vacuum cleaners, white goods, gas powered equipment, and non-electronic powered equipment. This event resulted in the collection of 84,730 pounds (42.37 tons) of materials. These materials were recycled through Atlanta Recycling Solutions of Atlanta, Georgia.

In addition, Atlanta Recycling Solutions offers on-call collection of electronics throughout the year to businesses and industry throughout Dougherty County. This service is free of charge. The amount collected through the ongoing program is reported to KADB.

#### 3.1.4.2 White Goods

The City delivers the white goods they collect to a recycler, Albany Recycling Services, Inc., on a weekly basis. In FY 2004 the City recycled nearly 810 tons of white goods, and in FY 2005 they recycled 495 tons. White goods that are self-hauled to the County Landfill are also recycled through Albany Recycling Services, Inc. In FY 2004 116 tons of white goods collected at the landfill were recycled and in FY 2005, 106 tons of white good were recycled. Both the County and the City have revenue sharing arrangement with this recycler.

#### 3.1.4.3 Paint

Volunteers deliver brochures and paint stir sticks to local paint distributors which educates residents about the proper way to dispose of paint. There is no household hazardous waste (HHW) management program in the County, however.

#### 3.1.4.4 Rechargeable Batteries

Ni-Cd rechargeable batteries are accepted at each of the drop-off sites. These batteries are recycled through the Rechargeable Battery Recycling Corporation (RBRC). The County has not collected enough batteries yet to fill a container, therefore no tonnage information is available.

#### 3.1.4.5 Tires, Automotive Batteries, Waste Oil, and Anti-freeze

Used tires, automobile batteries, waste oil, and anti-freeze are recycled through local automobile service shops throughout the County. The Marine Corps Logistics Base also recycles some used motor oil, some is managed through a hazardous waste management company, and they also recycle antifreeze and tires through private contractors.

#### 3.1.4.6 Mercury Thermometers

KADB sponsored a mercury thermometer exchange program in February 2004. Residents were able to exchange their mercury thermometers for safer types, and become educated about the hazards of mercury. At that time, 133 thermometers were exchanged.

#### 3.1.4.7 Used Ink Jet Printer Cartridges

The Dougherty County school system's gifted program (LIFE Lab) participates in an ink jet cartridge recycling program, in order to raise funds for field trips. Along with the schools' used ink jet cartridges, students and their families deliver ink jets to the participating schools for this project. KADB has provided some County and City government offices with collection bins so they can also contribute used ink jet cartridges to this program.

Table 3-4 provides an inventory of special materials collection programs that service the County.

#### 3.1.4.8 Pallets

Dougherty County collects pallets at the landfill and processes them using a tub grinder. The wood chips are used for County solid waste operations and given to citizens. The County has, in the past, sent wood chips to a local industry for use in their boiler. However, it has been a challenge to meet the specifications for boiler fuel with wood chips generated from pallets.

Material	Targeted Sector(s)	Management Strategy	Disposition of Material(s)
Electronics	Residential	Annual Collection Events sponsored by KADB	Packaged, transported, and dismantled by private recycler (Atlanta Recycling Solutions) and parts/metals sold.
White Goods	Residential	Collected by City, Trans Waste, and private haulers or residents deliver to County landfill.	Freon removed. Recycled
Laser Ink Jet Cartridges	Students, faculty, municipal offices	LifeLab Program in Dougherty County School	Mailed and sent to recycler for fundraiser for field trips
Mercury Thermometers	Residential	One-time collection event by KADB.	Managed by Onyx
Rechargeable/Ni-Cd Batteries	Residential	Drop-off	Rechargeable Battery Recycling Corporation (RBRC) program
Automobile Batteries	Residential	Local battery retailers accept used batteries when a new one is purchased.	Recycled
Tires	Residential	City delivers tires directly to private recycler. County collects at landfill, picked up by contractor.	Recycled
		And Auto shops	
Motor Oil	Residential	Auto shops	Recycled
Anti-freeze	Residential	Auto shops	Recycled

Table 3-4 Management of Special Materials

Source: KADB, Marine Corps Logistics Base, City and County telephone interviews and KADB printed materials.

### 3.1.5 Contingency Strategy

In the event of a natural disaster or emergency situation that resulted in the drop-off centers becoming unavailable, the facilities would be relocated (temporarily or permanently, depending on the situation) or collection of recyclables would be halted until the disrupted facilities could come back on line. However, it would be more difficult to replace processing capacity since there are few options for alternative processing in close proximity. Because of the County's geographical location, there are few public and private recycling facilities within a 50-mile radius. Table 3-5 shows recycling facilities in and around Dougherty County that accept typical recyclable materials, and that could potentially serve as alternative recycling facilities as a contingency. The Georgia Department of Community Affairs (DCA) web site

search resulted in no facilities located in the counties immediately surrounding Dougherty County. In addition, as mentioned above, the Marine Corps Logistics Base has some processing and storage capacity. If the disaster did not impact the base, the County could seek assistance in processing from this facility.

Recycler	Commodities Managed	County	Approximate Miles
Marine Corps Logistics Base 229-639-5637 Contact: Mr. John Topper	Plastics, aluminum cans, newspaper, old corrugated containers, glass, white bond paper, magazines	Dougherty	6
Early-Miller Service Center 218 Damascus St. Blakely, Georgia 39823 229 723-4324	Aluminum cans, paper, newspaper, old corrugated containers, magazines	Early	52
Blough Tech, Inc. 119 S Broad Street Cairo, Georgia 31728 229-377-8825 www.bloughtech.com	HDPE, LDPE, PP	Grady	57
Tifton-Tift County Recycling Organization 7750 Magnolia Industrial Blvd. Tifton, Georgia 31793 229-382-1475	Metals, steel cans, aluminum cans, paper, newspaper, old corrugated containers, mixed paper, magazines, office paper, other paper, glass, PET & HDPE plastics, phonebooks	Tift	43

Table 3-5
Alternative Recyclers Around Dougherty County

Source: DCA web site; Map quest.

The County may also choose to contact individual end markets for each commodity. The County can negotiate with these private companies to provide a collection and marketing option for recyclable materials on an "as needed" basis.

# 3.2 Needs and Goals

*Goal*: To reduce the amount of waste disposed, on a per capita basis, by an additional 3 percent between FY 2007 and FY 2016.

Goal: To divert yard trimmings from inert disposal.

- 1. Increase the number of drop-off locations using an approach that minimizes costs.
- 2. Expand materials collected in cases where the cost of collection and processing is lower than the revenue gained.

- 3. Develop a yard waste mulching program to beneficially reuse processed yard waste.
- 4. Continue to support KADB's efforts toward developing waste reduction and recycling programs and outreach materials.

# 4.1 Inventory and Assessment of Collection Programs

In its original Solid Waste Management Plan of 1993, the City of Albany and Dougherty County stated that they would implement a phased approach to Countywide collection of MSW. To do this, the City of Albany and Dougherty County have divided solid waste management responsibilities to avoid duplication of effort, provide assurance of cost-effective and efficient service, and unify the collection service County-wide. The City of Albany has responsibility for collection throughout the County while Dougherty County is responsible for disposal. These responsibilities are established in the Intergovernmental Solid Waste Services and Facilities Contract included as Appendix A.

### 4.1.1 Collection within the City of Albany

Within the City of Albany, all residents are required to use the solid waste collection service provided by the City of Albany, either through its own forces or through a contractor (Section 14-52(2) of the Albany City Code included as Appendix B). The City's Solid Waste Department collection crews currently collect from 13,452 households in the City while its contractor, Trans Waste, serves the remaining 11,472 households. All residents receive weekly collection of solid waste and white goods from the curb or alley, bimonthly collection of yard trimmings, bimonthly collection of brown goods (bulky waste), collection of waste tires is provided on an on-call basis. Four passenger tires per household, per calendar year are allowed to be set out for collection at no charge.

The Agreement between the City and Trans Waste (included as Appendix C) was executed in January 2004 with a beginning date of March 1, 2004. The Agreement is for one year with the option to renew annually for four additional years. The City renewed the Agreement in 2005 for one year.

The City bills residents \$22.10 per month for solid waste collection service via the utility bill and pays Trans Waste \$16.87 per residential unit per month for the households it serves.

All MSW collected by the City or by its contractor is disposed at the Dougherty County Landfill; all yard debris is disposed at the Maple Street Inert Facility; all white goods are delivered to a recycler as directed by the City's Solid Waste Superintendent; and all waste tires are disposed at a licensed tire recycling or disposal facility.



Businesses in the City are required to use the collection services provided by the City of Albany or a service provided by an approved state-certified hauler operating under permit from the City Manager. Currently, the City serves 1,713 commercial accounts. Per the City's amended Article III, Section 14-52 (2) of the City's Comprehensive Solid Waste, Wastewater and Sewer Pre-Treatment Ordinance, "All commercial units are required to utilize the solid waste collection service provided by the City of Albany or a service provided by an approved state-certified hauler operating under permit from the city manager." In the past, the City of Albany has not had the resources to enforce the City code relevant to state-registered haulers. However, in 2005, the City hired two solid waste code enforcement officers to ensure compliance with the City's solid waste ordinance.

All private haulers collecting MSW within the City are charged a franchise fee of 5 percent of gross revenue, per Section 14-32 of the City's Garbage, Trash, and Rubbish Ordinance (included as Appendix D).

The collection of recyclables within the City is described in Section 3.

### 4.1.2 Collection in the Unincorporated County

As authorized by the Intergovernmental Solid Waste Services and Facilities Contract, the City of Albany has the power and authority to extend collection services into Dougherty County where authorized by contract with the County. Currently private haulers collect municipal solid waste (MSW) on a subscription basis from residential accounts and commercial accounts in the unincorporated areas of the County. However, at the time this plan was drafted, the City was considering proposals for a contractor to collect solid waste from residents in the unincorporated portion of the County.

Section 2-14-7 of Dougherty County's Solid Waste ordinance (included as Appendix E), requires haulers to obtain a business license from the County to collect, transport or dispose of solid waste. No other license or permit is required. Table 4-1 shows the haulers currently permitted to operate in Dougherty County.

In addition, residents have the option of delivering solid waste to the convenience center located at the landfill. There is no disposal fee for less than 250 pounds for residents. For more than 250 pounds, the residents are billed \$27 per ton. Businesses that deliver directly to the landfill pay \$27 per ton.

Collection of recyclables in the County is described in Section 3.

Hauler Name	Hauler Address	Jurisdiction Served
City of Albany Solid Waste Division	1900 N. Monroe Street Albany, GA 31702	City - residential and commercial accounts
Trans Waste Services, Inc.	1723 Washington Street Albany, GA 31701	City - residential and commercial accounts
		County - residential and commercial accounts in the unincorporated areas
Onyx Waste Services LLC	5727 Newton Road	City - commercial accounts
	Albany, GA 31701	County - residential and commercial accounts in the unincorporated areas
Allied Waste Services	1515 Pecan Lane	City - commercial accounts
	Albany, GA 31705	County - residential and commercial accounts in the unincorporated areas

Table 4-1 Solid Waste Haulers Operating in Dougherty County<sup>1</sup>

<sup>1</sup> Source: City of Albany, Solid Waste Division.

### 4.1.3 Transfer Stations

EPD's database indicates that four transfer stations are permitted to operate in Dougherty County although only one is currently operating. This facility is owned and operated by Quality Compliance, Inc. located at 1532 South Mock Road in Albany (permit number PBR-047-32TS). Solid waste delivered to this facility is transferred to the Allied Services, LLC-SR90/SR 137 Charing Landfill in Taylor County. Because all solid waste generated in the County is to be disposed at the Dougherty County landfill according to County Resolution 04-031 (Appendix F), this transfer station should only be accepting solid waste generated from outside of Dougherty County. Records from 2004 indicate that nearly 22,000 tons of MSW were disposed at the Allied Charing Road landfill in Taylor County from Dougherty County. It is likely that this waste came through the Quality Compliance, Inc. landfill. At the time this Plan was prepared, there was no way to document whether Dougherty County waste continued to flow through the transfer station.

Table 4-2 shows the collection programs and transfer facilities (open to the public) operating in the County.

Туре	Collector/ Operator	Program Description	Jurisdictions Served	Sectors Served	No. of Households/ Businesses Served	Contractual Arrangements
Curbside MSW Collection	City of Albany	MSW - 1x/week Yard Debris - 2x/mo Brown Goods – 2x/mo White Goods – On call Waste Tires – On call	City of Albany	Residential	13,452 Households (HHs) in City	None
Curbside MSW Collection	Trans Waste Services (City's Contracted Hauler)	Same services as City of Albany (above)	City of Albany	Residential	11,472 HHs in City	City contracts directly with one hauler to provide services
Curbside MSW Collection	Private Haulers	Same services as City of Albany	Unincorporated areas of County	Residential	Unknown	Residents arrange for collection with hauler of choice. The City has authority to offer collection through contractor.
Convenience Center	Dougherty County	At landfill	Unincorporated County	Residential	Unknown	None
Commercial MSW Collection	City of Albany	One to six days per week	City of Albany	Commercial	1,713 commercial accounts (approx.)	Entities arrange for collection with hauler of choice
Commercial MSW Collection	Private haulers, open competition	One to six days per week	County-wide	Commercial	Unknown	Entities arrange for collection with hauler of choice
Recycling Drop-Off Centers	City of Albany	3 sites	County-wide	Residential and Commercial	N/A	City owns and operates sites; collects materials 2x/week and transports to Southeastern Aluminum Recycling processing facility

 Table 4-2

 Inventory of Collection Programs<sup>1</sup>

inventory of collection Programs <sup>1</sup>						
Туре	Collector/ Operator	Program Description	Jurisdictions Served	Sectors Served	No. of Households/ Businesses Served	Contractual Arrangements
Recycling Drop-Off Site	Dougherty County	One site located at the County Landfill	County-wide	Residential and Commercial	N/A	None
Recycling Collected from City & County Buildings	Dougherty County	Cardboard, mixed paper, aluminum, and glass collected from 41 City and County offices (see list in Section 3)	City of Albany and Dougherty County government offices and buildings	Commercial (government)	41 offices/buildings	None
Transfer Station	Quality Compliance	Accepts: MSW	Unknown	Residential and Commercial	N/A	Fee charged upon delivery

#### Table 4-2 Inventory of Collection Programs<sup>1</sup>

<sup>1</sup> Source: City of Albany and Dougherty County.

### 4.1.4 Yard Trimmings and Bulk Item Collection

Per the City of Albany's Solid Waste Ordinance and the City's hauling Agreement with Trans Waste, all yard trimmings in the City of Albany are required to be collected separately from MSW (by the City and Trans Waste), twice per month. All yard trimmings collected from City residents are disposed at the City's Maple Street inert site.

Yard trimmings in the unincorporated areas of Dougherty County are collected separately from MSW (by the private haulers) as required in the County's Solid Waste Ordinance. In addition, County residents are allowed to dispose of yard trimmings at the convenience center at the County Landfill. Up to 250 pounds is free for residents while residents are charged \$27.00 per ton above 250 pounds. Commercial businesses may dispose of yard trimmings at the County Landfill for \$27.00 per ton.

Bulky items (also referred to as brown goods) are collected by the City, Trans Waste, and private haulers as part of the curbside collection service provided to City and County residents, twice per month. In addition, residents and commercial customers can drop off or delivery bulky items at the County Landfill.

White goods (appliances) are collected weekly by the City and Trans Waste as part of the curbside collection service provided to City residents and are delivered directly to a recycler. Residents that live in the unincorporated areas either self-haul white goods to the landfill, or pay their haulers extra for this service. Appliances that are selfhauled by residents to the County Landfill are accepted at no charge. The County and the City recycle the white goods with Albany Recycling Services, Inc. and both entities receive revenue for the materials.

### 4.1.5 Illegal Dumping/Littering

The City addresses illegal dumping and littering in its Comprehensive Solid Waste, Wastewater and Sewer Pre-Treatment Ordinance (Section 14-57, Prohibited Activities) and the County in its Solid Waste Ordinance. Keep Albany-Dougherty Beautiful, the building official or inspectors designated by him, the members of the County Police Department, the members of the County Sheriff's Department and the County Department of Public Works investigate and report all complaints of violations to these ordinances. Violations of the ordinance are tried in the municipal or magistrate court of the County and are tried in accordance with the official Code of Georgia.

The Courts instate several levels of action to correct a violation. Any person violating the ordinance, upon conviction, shall be punished as follows:

- 1. By a fine of not less than one hundred dollars (\$100.00) and not more than one thousand dollars (\$1,000.00);
- 2. In the sound discretion of a court in which conviction is obtained, the person may be directed to pick up and remove from any public or highway or public right-of-way for a distance not to exceed one (1) mile any litter he has

deposited and any and all litter deposited thereon by anyone else prior to the date of execution of sentence; or

- 3. In the sound discretion of the judge of a court in which conviction is obtained, the person may be directed to pick up and remove from any public beach, public park, private right-of-way, or with the prior permission of the legal owner or tenant in lawful possession of such property, any private property upon which it can be established by competent evidence that he has deposited litter, any and all litter deposited thereof by anyone prior to the date of execution of sentence.
- 4. The court may publish the names of persons convicted of violating the ordinance.

No person accused of violating the ordinance shall be arrested prior to trial, but any defendant who fails to appear for trial shall be arrested thereafter on the warrant of the magistrate, and required to post bond for his future appearance.

In addition to these enforcement options, Dougherty County provides funds to Keep Albany-Dougherty Beautiful (KADB) to control litter and prevent illegal dumping through education. The following is a list of KADB's litter prevention programs and activities:

- Television broadcasts of illegal dumpsites. In FY 2005, KADB partnered with the City's Code Enforcement Department and the local NBC TV affiliate to broadcast on the 6:00 p.m. news the KADB Executive Director interviewing a code enforcement officer at an illegal dump site when the depositor of the illegal debris has been identified. By stating the offender's name, address, court date, and possible fine and punishment, these interviews have become an effective tool in curbing illegal dumping.
- Stash the Trash (nationally known as the Great American Cleanup). This annual volunteer-based cleanup effort removed 107 tons of debris from 69 miles of roadway in 2005. In 2005, 2,809 volunteers participated.
- Rivers Alive. In October 2004, KADB sponsored the first annual "Rivers Alive" event. Sixty-two volunteers removed over fourteen tons of debris along the Flint River.
- National Litterbag Day. Three local banks distributed 3,000 KADB auto litter bags to their customers during Keep Georgia Beautiful month.
- Adopt-A-Highway. In FY 2005, 28 teams removed litter from their designated adopted areas.
- Junk Car Initiative. Through a partnership with local salvage companies, junked or abandoned cars can be removed at no charge to residents. In the last two years over 4,000 junked or abandoned automobiles have been removed within the County.
- Also in FY 2005, 17 "Thank You for Not Littering" signs were placed on City right-of-ways to remind citizens not to litter.

- KADB oversees the publishing and distribution of many educational materials including:
  - "Litter Free School Zone" packets, distributed to local schools;
  - "Illegal Dump" brochures, distributed at environmental presentations; and
  - Clean Business" is a tabloid that is distributed as an insert in The Albany Herald. It was distributed to 29,000 readers in January 2006 and another issue is scheduled to be distributed in April 2006. This 12-page piece addressed littering, water, recycling, beautification and other environmental business issues.

### 4.1.6 Contingency Strategy

The City has oversight for collection operations throughout the County. If the City could not provide adequate collection services through its own forces or through its current contractors, it would call upon the other collectors operating in the region (starting with those already registered to operate in the County, listed in Table 4-1) to assist in collection efforts. For example, during the floods of 1994 and 1998, and the hurricane damage in 2004, the City pooled all of its resources to collect storm debris as quickly as possible after each of those events using its own vehicles and staff, calling in contractors to assist when needed.

# 4.2 Needs and Goals

**Goal**: To provide consistent and universal access to collection services for solid waste and recyclable materials to all citizens in Dougherty County.

- 1. Consider entering into contract or franchise agreements for collection in unincorporated areas of the County.
- 2. Enforce requirement that all haulers operating in the City and County are registered with the State.
- 3. Enforce City and County policy that all MSW collected throughout the County be delivered to the County landfill.
- 4. Contract with collectors and disposal facilities to complement services provided by the City and County in case of disaster.
- 5. Expand City-operated service for commercial collection.

# 5.1 Inventory and Assessment of Facilities Located in County

### 5.1.1 Landfills Located in the County

Per the Georgia Department of Natural Resources' Environmental Protection Division (EPD), there are three operating landfills in Dougherty County:

- Fleming/Gaissert Road Municipal Solid Waste Landfill owned and operated by the County;
- Fleming/Gaissert Road Construction and Demolition Landfill owned and operated by the County; and
- Maple Street Inert Landfill owned and operated by the City of Albany.

Dougherty County's MSW Landfill is the primary disposal facility for residential and commercial solid waste generated in the County and the City of Albany. It is located at 900 Gaissert Road in Albany. The landfill is open 7:30 a.m. to 5:00 p.m., Monday through Friday, and 7:30 a.m. to 12:00 p.m. on Saturday. The landfill receives approximately 319 tons<sup>1</sup> of MSW per day and is expected to reach capacity in the year 2027.

The County also accepts C&D material at its landfill, under the same permit number, however the material is diverted to a separate, unlined area. The C&D site received 28,991 tons of C&D material in  $2004^2$  and is expected to reach capacity in 2013.

The City of Albany's Maple Street inert landfill is the primary disposal facility for the City of Albany's inert waste such as yard trimmings and other similar materials, concrete, asphalt, bricks, rocks, etc. The Maple Street Landfill is located at 900 North Maple Street in Albany. The facility is not open to the public; it is used exclusively by the City of Albany and its contracted hauler, Trans Waste. In the past two years approximately 3,000 tons per month were received at the site.

According to EPD permit records, there is one closed C&D landfill in the County - the Maple Hill Landfill owned by Bruce Melton which closed in 1999. However, a new Solid Waste Handling Permit (#047-023D - C&D) was issued to Mr. Melton, President of Maple Hill Landfill, Inc., on July 29, 2005. The site consists of

<sup>&</sup>lt;sup>2</sup> Source: Remaining C&D Capacity Report submitted to the EPD in September 2004.



<sup>&</sup>lt;sup>1</sup> Source: Remaining MSW Capacity Report submitted to the EPD in September 2004.

approximately 246 acres and is located on U.S. Highway 82, east of Albany. The facility is expected to open by June 2006. C&D waste will be accepted from a three or four county area. The landfill will have disposal capacity of approximately 11,650,000 cubic yards of air space on a footprint of 70 acres with a life expectancy of over 50 years. Hours of disposal operation will be 7:30 am to 5:30 pm Monday through Friday and 7:30 am to 2:00 pm on Saturdays. There will also be a temporary storage area at the landfill for storing of white goods for periodic off-site recycling. Maple Hill anticipates charging a fee of \$28.00 per ton for all C&D material received at the site. Daily volume tonnage is estimated to vary between 150 and 400 tons per day.

The landfills and their EPD permit numbers are listed in Table 5-1. The location of these landfills, along with transfer stations, C&D landfills, and recycling facilities are shown in Figure 5-1. Besides the City's inert landfill, EPD's database also lists 10 other inert landfills in Dougherty County. These inert landfills are primarily on construction sites and used exclusively by the permittee on a temporary basis.

	5,	<b>y</b> .
Facility Name	Permit Number	Waste Accepted
Dougherty County Fleming Road/Gaissert Road Sanitary Landfill	047-014D (SL)	MSW and C&D
Maple Street Inert Landfill	047-30IL	Inert Materials
Maple Hill Landfill (under construction)	047-023D (C&D)	C&D

Table 5-1 Permitted Landfills in Dougherty County, 2004

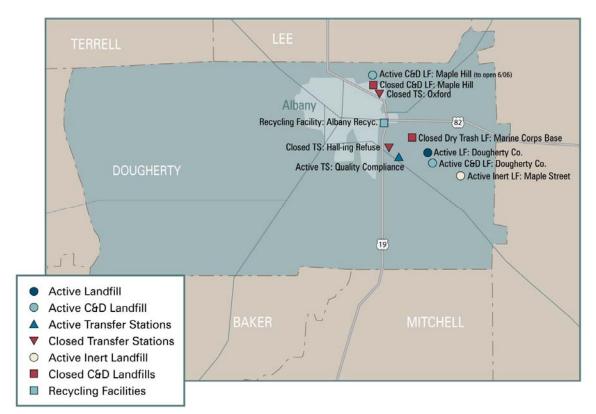


Figure 5-1: Solid Waste and Recycling Facilities in Dougherty County

# 5.2 Disposal Facilities Used by County

All solid waste generated in the County is to be disposed at the Dougherty County Landfill according to County Resolution 04-031 (Appendix F), which was passed in August 2005. Based on disposal reports provided to EPD from solid waste disposal facilities, waste collected in Dougherty County was disposed in six different municipal solid waste landfills, located in six counties, in 2004 (Table 5-2). Just over three-quarters of the MSW disposed from the County was delivered to the Dougherty County Landfill while another 18 percent was delivered to the Allied Services Charing Landfill in Taylor County, most likely through the Quality Compliance transfer station.

County	Facility Name	Permit Number	Tons Delivered	Year Expected to Reach Capacity
DeKalb	WMI-Live Oak #2	044-047D	910	In-closure
Dougherty	Dougherty County Fleming Road/Gaissert Road Sanitary Landfill	047-014D	94,585	2027
Lowndes	Pecan Row MSW Landfill	092-019D	6,242	2010
Taylor	Allied Services, LLC – SR 90/SR 137 Charing	133-003D	21,897	2030
Thomas	Thomasville/Sunset Dr. Phase 4 MSWL	136-012D	5	2023
Wayne	Broadhurst Environmental	151-014D	9	2019

#### Table 5-2 Municipal Solid Waste Landfills Accepting Waste from Dougherty County, 2004<sup>1</sup>

<sup>1</sup>2004 Landfill Reports, Georgia EPD.

In 2004, haulers delivered C&D waste collected in Dougherty County to the County's C&D Landfill. No other C&D landfills received C&D waste originating in Dougherty County in 2004 according to EPD records. The Dougherty County C&D Landfill is expected to reach capacity in 2013.

### 5.2.1 Assurance of 10-Year Capacity

As the County enforces its policy that all MSW be disposed at the Dougherty County Landfill, it is anticipated that all waste collected in the County will be disposed at this facility throughout the planning period. According to the waste stream disposal analysis included in Section 2, at current per-capita disposal rates, a total of 1,259,207 tons will enter MSW landfills from Dougherty County over the next 10 years. The most recent capacity report for this landfill, prepared in September of 2004, indicated that 5,820,717 cubic yards of permitted space remained in the Dougherty County Landfill. Assuming a density of 1,011 pounds per cubic yard, this means that the Dougherty County Landfill had capacity for 2.94 million tons of waste, this is more than twice as much as anticipated between 2007 through 2016, even without anticipated waste reduction. Appendix G contains a letter from the Dougherty County Landfill stating that it has the capacity to accept all the MSW disposed from Dougherty County generators over the next ten years.

### 5.2.2 Contingency Strategy

There are several landfills available to accept Dougherty County's waste as evidenced by the fact that four landfills currently report that they accept waste from the County. In the event that the Dougherty County Landfill becomes unavailable, the County would solicit proposals from disposal facilities to accept the waste from the City and County until the Dougherty County Landfill becomes available again. Dougherty County would be responsible for providing for the disposition of all MSW disposed from the City and the County as required by the Interlocal Contract between Dougherty County and the City of Albany.

# 5.3 Statement of Needs and Goals

*Goal:* Ensure sufficient disposal capacity to handle the amount of waste projected to be disposed for the next ten years.

**Goal**: Ensure that existing and proposed solid waste handling facilities located in the City and County are consistent with this and previous solid waste planning documents and do not negatively impact the natural environment or public health.

- 1. Operate and monitor County landfill to ensure sufficient capacity to handle all of the waste generated in the County for the next ten years and beyond.
- 2. Enforce County policy that all MSW be disposed at the County landfill.
- 3. Evaluate the potential of a host fee on solid waste handling facilities operating in the County.
- 4. Monitor all solid waste handling facilities located in the County, County and privately operated, to ensure that they are operated in a manner that protects public health and the environment and are consistent with solid waste management plan.

Solid waste disposal facilities and other solid waste handling facilities should be located where they have minimum adverse effects on the community and the environment. This section outlines the land limitations, policies and procedures that the City of Albany and Dougherty County will consider when evaluating a new solid waste management facility or the expansion of an existing solid waste management facility.

# 6.1 Natural Environmental Limitations

Federal, State, and County policy contain restrictions on where in Dougherty County solid waste facilities can be sited and, in some cases, the design required to site facilities in a specific area, based on natural environmental features. This section discusses these limitations in more detail. Figure 6-1, provided by DCA, indicates the areas in Dougherty County impacted by some of these limitations, as well as those impacted by some of the land use limitations described in Section 6.2.

- Floodplains DNR Rule 391-3-4-.05(1)(d) stipulates that any solid waste landfill located in the 100-year floodplain shall not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the flood plain, or result in a washout of solid waste so as to pose a threat to human health of the environment.
- Wetlands DNR Rule 391-3-4-.05(1)(e) prohibits the development of solid waste landfills in wetlands, as defined by the U.S. Army Corps of Engineers, unless evidence is provided by the applicant that use of the wetland has been permitted or otherwise authorized under all other applicable state and federal laws and rules.
- Water Supply Watersheds DNR Rule 391-3-16-.10(7)c1 requires that at any location within a small water supply watershed, new solid waste landfills must have synthetic liners and leachate collection systems.
- Groundwater Recharge Areas The official code of Georgia (O.C.G.A.) Section 12-8-25.2 states that no permit shall be issued for a municipal solid waste landfill if any part of the site is within two miles of an area that has been designated by the EPD Director as a significant groundwater recharge area unless such municipal solid waste landfill has a liner and leachate collection system and meets any other requirements as may be established by rules and regulations of the board or pursuant to other geological considerations as may be determined appropriate by the EPD Director.



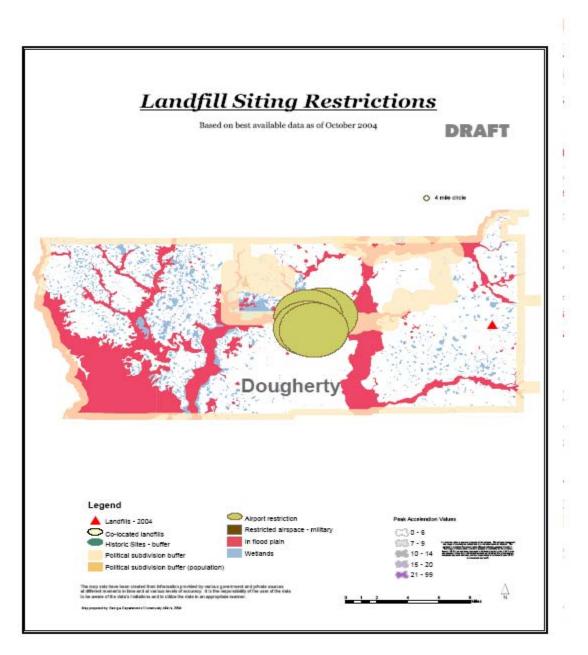


Figure 6-1: Landfill Siting Restrictions in Dougherty County

- River Corridors DNR Rules prohibit the development of new solid waste landfills within protected river corridors.
- Protected Mountains DNR Rule 391-3-16.05(4)(1) prohibits the development of new solid waste landfills in areas designated as protected mountains. There are no protected mountains in the County.
- Fault Zones, Seismic Impact Zones, and Unstable Areas (Karst Areas) A hydrogeological assessment must be conducted at the location of any proposed solid waste disposal facility. Such an assessment must be performed under the direction of a registered geologist or professional engineer. Technical issues

which involve seismic activity, fault lines, unstable areas, such as karst areas must be evaluated in the preliminary site selection phase. Any condition that would likely result in a release of pollution from a site may not receive EPD approval during the solid waste handling permitting process, unless mitigating or supplemental protection is provided.

DNR Rule 391-3-4-.05(1)(f) focuses on fault areas and requires that new landfill units and lateral expansions of existing landfills not be located within 200 feet of a fault that has had a displacement in Holocene time, unless an alternative setback distance of less than 200 feet will prevent damage to the structural integrity of the landfill and will protect human health and the environment.

DNR Rule 391-3-4-.05(1)(g) prohibits the development of new landfills and lateral expansions of existing landfills in seismic impact zones, unless all landfill containment structures, including existing landfill liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site.

According to DNR Rule 391-3-4-.05(1)(h), existing landfills and lateral expansions of existing landfills located in an unstable area must demonstrate that engineering measures have been incorporated into the landfill's design to ensure that the integrity of the structural components of the landfill will not be compromised.

# 6.2 Land Use and Zoning Limitations

### 6.2.1 Zoning Restrictions

DNR Rule 391-3-4-.05(1)(a) requires that solid waste facility sites must conform to all local zoning/land use ordinances. The Zoning Ordinance of the City of Albany and Dougherty County (Title 1) divides the County into 23 classes of Districts and stipulates the allowable uses for each District classification. Inert landfills, MSW landfills, and construction and demolition landfills are all restricted to an M-2, or Heavy Industrial District, as a conditional use. Special approval by the City or County Commission is required.

Currently, the Zoning Ordinance does not specify the allowable Districts for transfer stations. The only transfer station located in the County is located in the M-1 (light industrial) District. The Zoning Ordinance is scheduled to be rewritten in 2006 and a waste transfer station will be considered in the schedule of uses by District. Figure 6-2 highlights the Districts in the County that are zoned M-1 (Light Industrial) and M-2 (Heavy Industrial).

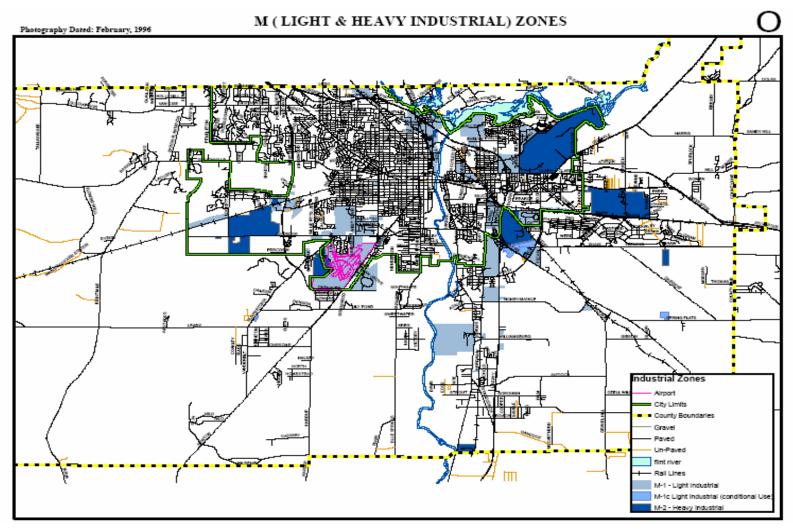


Figure 6-2: Light and Heavy Industrial Zones in Dougherty County

In addition to conforming with the uses specified according to the Zoning Ordinance, Section 1.43 of the Zoning Ordinance specifically addresses the items that must be included in an application to the City/County Commission for a landfill, many of which are intended to ensure that the site proposed is consistent with the EPD regulations described in Section 6.1 and below. The items that must be included in an application for special approval to the City and County Commission include:

- General site area;
- Description of general site area;
- Proximity to roads, airports, and railroads;
- Proximity to county boundaries and national historic sites;
- Proximity to floodplains;
- Proximity to streams and wetlands;
- Proximity to public and domestic water supplies;
- Zoning and notification;
- Topographic map of general site area (1:24,000) where appropriate, the watershed of any downstream public water supplies should be shown; this may require topographic maps of another scale, such as 1:100,000;
- Topographic map of site (showing floodplains and wetlands exceeding 2 acres in size);
- Map showing proximity of site most significant groundwater recharge areas;
- Map showing proximity to public water supplies;
- Map showing domestic water supplies within ½ mile of site boundaries;
- Description of soils and rocks; and
- Description of geologic and/or natural hazards;

In addition, the Ordinance requires that:

- Landfills shall have a 200-foot buffer between the waste disposal boundary and any wetland; surface water as depicted on a 7.5-Minute U.S. Quadrangle Map, 100-year floodplain, or property line; and
- Landfills shall have a 500-foot buffer between the waste disposal boundary and any occupied dwelling and the dwelling's operational private domestic water supply well in existence on the date of the permit application.

Inert and construction and demolition landfills are included in the definition of a landfill in the Ordinance.

A waste transfer station must obtain a permit from the EPD Solid Waste Management Division to operate in Dougherty County. Before issuance of the permit, the applicant must furnish written verification to the EPD that the proposed facility complies with local zoning or land use ordinances. A business license is also required.

### 6.2.2 Design Restrictions on Landfills in Zoning Ordinance

Solid waste handling facilities generate considerable truck traffic and should be located near major roads. Odor and noise are also associated with solid waste handling facilities. The City of Albany and Dougherty County Zoning Ordinance requires a minimum 200-foot wide buffer for landfills adjacent to residential districts and uses and a minimum of 50-foot wide buffer adjacent to public rights of way. In addition, a minimum fence of six feet in height is required inside the buffers adjacent to property zoned for residential uses. Access through any residential subdivision is prohibited.

### 6.2.3 Other Land Use Restrictions

- National Historic Sites MSW landfills are not permitted within 5,708 yards of a National Historic Site (O.C.G.A. Section 12-8-25.1). There are only three designated National Historic Sites in the State that are included in this restriction and none are in Dougherty County.
- Archaeological Sites The Archaeological Resources Protection Act of 1979 requires federal agencies or local governments utilizing federal funds to conduct archaeological investigations on lands under their jurisdiction to determine the nature and extent of the protected cultural resources present. Therefore, no solid waste handling facility should be located so as to negatively impact an area of concentrated or known archaeological sites on file with the Georgia Archaeological Site File (GASF). Located at the University of Georgia, the GASF is the official repository for information about known archaeological sites in the state of Georgia. Because specific information concerning the location and contents of archaeological sites is protected by Georgia Law (O.C.G.A. 50-18-72 [a][10]), direct access to the complete information held by the GASF is restricted to qualified archaeologists and archaeology students. If a facility siting has the potential to impact an area of concentrated or known archaeological sites, then consultation with the State Archaeologist and the State Historic Preservation Office (SHPO) would be required.
- Surface Water Intake According to the Georgia DNR Rule 391-3-16-.01, unless there are no other feasible locations, solid waste landfills should not be located within two miles of a surface water intake for a public water source.
- Airport Safety DNR Rule 391-3-4-.05(1)(c) requires that new solid waste landfill units or lateral expansions of existing units shall not be within 5,000 feet of any runway planned or used for piston-type aircraft or within 10,000 feet of any runway planned or used for turbo-jet or piston-type aircraft. Figure 6-1, provided by the Georgia Department of Community Affairs, indicates the land in Dougherty County impacted by siting restrictions for MSW landfills (including construction and demolition landfills), impacted by siting restrictions for MSW and C&D landfills, including this requirement for airport safety.
- Co-Located Landfills Section 12-8-25.4 of the O.C.G.A. states that no solid waste handling facility, excluding materials recovery facilities and composting facilities, can be sited on a site that falls within a two-mile radius of three or more solid waste

landfills (including closed landfills that received waste on or after June 29, 1989). Figure 6-1 indicates the areas in the County impacted by this requirement.

- Political Subdivisions O.G.G.A. Section 12-8-25 prohibits the siting of an MSW landfill within one-half mile of another County's borders without the approval of the jurisdiction's governing authority. Dougherty County borders six other counties.
- Private Recreational Camps O.C.G.A Section 12-8-25.5 states that no permit shall be issued for any new municipal solid waste disposal facility if any part of the premises proposed for permitting is within one mile of any private recreational camp operated primarily for use by persons under 18 years of age and which camp has been so operated at its location for 25 years or more.

# 6.3 Local Procedures for Siting Solid Waste Facilities

No proposed solid waste handling facility or facility expansion will be sited in the City of Albany or Dougherty County without a letter from the governing body of the applicable jurisdiction stating that the proposed facility is consistent with the Solid Waste Management Plan. The procedure for determining whether a proposed facility or facility expansion is consistent with the Solid Waste Management Plan is as follows:

- 1. At least 60 days prior to filing for a solid waste handling permit, or notifying EPD in the case of a solid waste handling facility that is permitted by rule, the applicant will submit to the governing body a written statement documenting the following:
  - How the proposed facility or facility expansion will meet the specific goals and/or needs identified in the Solid Waste Management Plan, including a description of:
    - The impact upon the collection capability within the City and County;
    - The impact upon disposal capacity identified in the City and County; and
    - The impact to the waste reduction and recycling efforts within the City and County, specifically how the proposed facility or facility expansion will further progress towards waste reduction.
  - How the proposed facility or facility expansion and its operation will impact the community. Specifically what will be:
    - The impact to vehicle traffic and public safety around the proposed facility and throughout the County;
    - The impact on natural or cultural resources within the County;
    - The impact to the financial viability of the existing solid waste management system within the City and County;
    - The impact to individual and business solid waste management rates; and
    - The impact on the current solid waste management infrastructure within the City and County, both public and private.

- Evidence that the proposed facility or facility expansion is sited in an area deemed suitable according to the criteria listed in the Plan.
- Evidence that the proposed facility expansion is sited in a location that is consistent with local zoning ordinances.
- That the proper public notification was given, including notification of all adjacent property owners.
- 2. Within 30 days after this document is received, the governing body will hold at least one public hearing on the proposed facility or facility expansion to gather input regarding the consistency of the facility with the Solid Waste Management Plan. This public hearing will be advertised according to local requirements regarding public notification of public hearings.
- 3. The governing body shall review the written documentation for consistency and consider public comment and determine whether the proposed facility or facility expansion is consistent with the Solid Waste Management Plan. Within 30 days of making their determination the governing body shall notify the facility owner/operator whether or not the proposed facility or facility expansion is consistent with the Plan. If the proposed facility is not consistent with the Plan, the developer may address the inconsistencies and resubmit their request for another review.

### 6.4 Needs and Goals

**Goal:** To ensure that proposed solid waste handling facilities are consistent with the City of Albany and Dougherty County Zoning Resolution, compatible with surrounding land uses, meet federal, State and local environmental requirements, and are consistent with the City and County's Land Use and Solid Waste Management Plans.

- 1. Keep all information about natural environmental limitations, zoning, and land use updated and available.
- 2. Inform and educate potential developers about the procedures to determine consistency of proposed facilities with City and County solid waste planning documents.
- 3. Enforce the requirement that no solid waste handling facility be sited in the County without a letter from the governing authority documenting its consistency with the Solid Waste Management Plan using the procedures described herein.

# 7.1 Inventory and Assessment of Public Education and Involvement

KADB is the primary organization involved with education and outreach pertaining to waste reduction, recycling, and litter prevention, offering programs and materials to residents and businesses in Dougherty County. KADB provides information and outreach at public events, community business and civic meetings, schools, and reaches out directly to businesses as well.

KADB, coordinates education and public involvement programs such as Adopt-A-Tree, Adopt-A-Road, Arbor Day, Adopt-A-Spot, Litter Free School Zone, Office Recycling, Make-A-Difference Day, Clean Business Month, and the Great American Cleanup. They produce and provide printed materials to citizens and businesses of the County. The KADB web site also provides information about recycling and waste reduction.

Dougherty County dedicates significant funding (\$181,714 budgeted in FY 2006 through the Solid Waste Enterprise Fund) for administrative and staff resources at Keep Albany-Dougherty Beautiful (KADB). Funding also comes from private sources.

Table 7-1 describes the public education and involvement activities in Dougherty County. Table 7-2 provides information pertaining to the printed materials that are distributed to advertise and promote these programs.



Program/Project	Jurisdictions Covered	Operated by	Target Audience	Description of Impact		
Stash-The-Trash	Dougherty County	erty County KADB, with assistance from City haulers and County landfill		Approx. 80 miles of roadway are cleaned annually.		
Duncan D. Trash Litter Containers	Dougherty County	KADB	Public events	Encourage recycling and promote litter-free events.		
Automobile Litterbag Giveaways	Dougherty County	KADB, with the assistance of local banks.	General public	Banks distribute auto litter bags to encourage proper management of waste.		
Adopt-A-Highway	Dougherty County	KADB, in conjunction with the Department of Transportation and the County Department of Public Works	General public	Approx. 30 city teams remove litter at least four times a year from state highways in the county.		
Clean Business Month	Dougherty County	KADB	Businesses	Twelve businesses are honored annually and saluted with a color picture in The Albany Herald.		
Solid Waste Employee of the Year	Dougherty County	KADB, City and County solid waste departments.	Solid waste employees	Recognize the hard work of the City and County employees.		
Adopt-A-Spot	Dougherty County	KADB	Civic groups	Encourages civic groups to adopt "unloved" city spots to be properly maintained.		
Litter Free School Zone	Dougherty County	KADB	Students and teachers	Encourages students to clean areas around the school as organized projects.		
Tree Plantings	Dougherty County	KADB and other civic groups	Community-at-large	Plant trees throughout the County.		
Arbor Day	Dougherty County	KADB, City of Albany	Community-at-large	City plants thousands of trees.		

Table 7-1Major Waste Reduction/Recycling Education and Outreach Programs – FY 2005

### EDUCATION AND PUBLIC INVOLVEMENT ELEMENT

Program/Project	Jurisdictions Covered	Operated by	Target Audience	Description of Impact
Earth Day	Dougherty County	KADB	Community-at-large	Annual celebration to promote proper stewardship of the earth – event usually held at Albany State University.
Duncan D. Trash	Dougherty County	KADB	Primarily elementary school-aged children.	Environmental mascot, attends schools and attends environmental presentations.
Waste in the Workplace	Dougherty County	KADB	Businesses	Dozens of businesses participate in this program each year, which enables participants to learn firsthand how and what to recycle in their workplace. Hundreds of offices recycle.
Recycling Drop-Off Sites	Dougherty County	KADB	Residents and small businesses	Three manned sites collect newsprint, aluminum, corrugated material, glass, plastic, magazines and Ni-Cd batteries.
School Newspaper Recycling	Dougherty County	KADB, in conjunction with county school system and Southeastern Newspaper Recycling Co.	Students and their parents	KADB educates students on recycling and is a partner with Southeastern Newspaper Recycling Co., which provides recycling dumpsters at 16 elementary schools.
Tire Recycling	Dougherty County	KADB/City	Residents	A state-funded scrap tire-recycling
		City collects up to four tires per year for residents, at no charge.		program is conducted year-round.
Let's Make A Difference Day	Dougherty County	KADB	Community-at-large	Areas are cleaned and trees are planted.

Program/Project	Jurisdictions Covered	Operated by	Target Audience	Description of Impact
Telephone Book Recycling	Dougherty County	KADB and City of Albany, along with corporate sponsor (e.g., McDonald's)	Residents and businesses	Collect telephone books for recycling – around 20 tons per year.

Promotional Item	Jurisdictions Covered	Operated by	Target Audience	Description of Impact
Keep Albany-Dougherty Beautiful Environmental Newsletters (Once per year)	ental Newsletters		Community-at-large	Reaches 30,000 residents (Albany- Herald readership) in County.
Students Can Promotional Flyer	Dougherty County	KADB	School children	15,000 distributed in schools to encourage them to recycle cans for the Habitat for Humanity promotion.
Newspaper Recycling Promotional Flyer	Dougherty County	KADB	School children	15,000 distributed in schools to encourage recycling of newspapers.
Telephone Book Promotional Flyer	Dougherty County	KADB	School children	15,000 distributed in schools to encourage recycling of telephone books.
Clean Business Month Advertisement	Dougherty County	KADB	Businesses	Reaches 30,000 residents (Albany- Herald readership) in County.
Clean Business Advertising Supplement (Annual Tabloid)	Dougherty County	KADB	Businesses	Reaches 30,000 readers of the Albany- Herald. 172 businesses pledged to recycle.
Award of Excellence	Dougherty County	KADB	Businesses	Rewarded 172 businesses that pledged to recycle.
Meredyth Recycling Site Hours Magnet	Dougherty County	KADB	Residents	Distributed 1,000 magnets at site – Inform about the hours of the Meredyth Recycling Site.
Recycle Albany Leaflet	Dougherty County	KADB and the City of Albany	Residents and Businesses	39,000 inserted in utility bills – educate about location and hours of recycling drop-off sites.
"Business Recycling Salute" Stickers	cling Salute" Dougherty County KADB		Businesses that recycle	Reward/promote businesses that recycle.

 Table 7-2

 Major Waste Reduction/Recycling Promotion and Outreach Printed Materials – FY 2005

Promotional Item	Jurisdictions Covered	Operated by	Target Audience	Description of Impact
Junk Car Recycling Flyer	Dougherty County	KADB	Residents and Businesses with junk cars	Flyer inserted in 39,000 utility bills. In 2 years, 4,000 vehicles recycled through program.
Paint Disposal Brochure	Dougherty County	KADB	Residents	Describes proper management of household paint.

### 7.2 Needs and Goals

**Goal**: Work with the City of Albany and Dougherty County to ensure that all citizens of the County have access to information about waste reduction and solid waste management in Dougherty County.

- 1. Continue to operate existing public education and involvement programs related to solid waste throughout KADB, with ongoing support from Dougherty County and the City of Albany.
- 2. Complement ongoing education and information programs with improved communications via web sites.

# 8.1 Summary of Needs and Goals

This Section provides an implementation strategy to meet the goals and needs identified in the Waste Reduction, Collection, Disposal, Land Limitation, and Public Education and Information Sections of this Plan. The needs and goals on which this implementation strategy is based, taken from the previous sections of this Plan, are summarized in the Table below.

# Table 8-1 Summary of the City of Albany and Dougherty County's Goals and Needs

#### WASTE REDUCTION

**Goal:** To reduce the amount of waste disposed, on a per capita basis, by an additional 3 percent between 2007 and 2016.

**Goal:** To divert yard trimmings from inert disposal.

#### Needs

- Increase the number of drop-off locations using an approach that minimizes costs.
- Expand materials collected in cases where the cost of collection and processing is lower than the revenue gained.
- Develop a yard waste mulching program to beneficially reuse processed yard waste.
- Continue to support KADB's efforts toward developing waste reduction and recycling programs and outreach materials.

#### COLLECTION

Goal: To provide consistent and universal access to collection services for solid waste and recyclable materials to all citizens in Dougherty County.

#### Needs

- Consider entering into contract or franchise agreements for collection in unincorporated areas of the County.
- Enforce requirement that all haulers operating in the City and County are registered with the State.
- Enforce City and County policy that all MSW collected throughout the County be delivered to the County landfill.



- Contract with collectors and disposal facilities to complement services provided by the City and County in case of disaster.
- Expand City operated commercial collection.

#### DISPOSAL

**Goal:** Ensure sufficient disposal capacity to handle the amount of waste projected to be disposed for the next ten years.

**Goal:** Ensure that existing and proposed solid waste handling facilities located in the City and County are consistent with this and previous solid waste planning documents and do not negatively impact the natural environment or public health.

#### Needs

- Operate and monitor County landfill to ensure sufficient capacity to handle all of the waste generated in the County for the next ten years and beyond.
- Enforce County policy that all MSW be disposed at the County landfill.
- Monitor all solid waste handling facilities located in the County, County and privately operated, to
  ensure that they are operated in a manner that protects public health and the environment and are
  consistent with solid waste management plan.

#### LAND LIMITATION

**Goal**: To ensure that proposed solid waste handling facilities are consistent with the City of Albany and Dougherty County Zoning Resolution, compatible with surrounding land uses, meet federal, State, and local environmental regulations, and are consistent with the City and County's Land Use and Solid Waste Management Plans.

#### Needs

- Keep all information about natural environmental limitations, zoning, and land use updated and available.
- Inform and educate potential developers about the procedures to determine consistency of proposed facilities with City and County solid waste planning documents.
- Enforce the requirement that no solid waste handling facility be sited in the County without a letter from the governing authority documenting its consistency with the Solid Waste Management Plan using the procedures described herein.

#### EDUCATION AND PUBLIC INVOLVEMENT

**Goal:** Work with the City of Albany and Dougherty County to ensure that all citizens of the County have access to information about waste reduction and solid waste management in Dougherty County.

#### Needs

- Continue to operate existing public education and involvement programs related to solid waste throughout KADB, with ongoing support from Dougherty County and the City of Albany.
- Complement ongoing education and information programs with improved communications via web sites.

# 8.2 Activities in Implementation Strategy

The implementation strategy, included as Table 8-2 identifies the activities that the City of Albany, Dougherty County, and KADB will undertake to meet these goals and needs over the next ten years, from FY2007 through fiscal year FY2016. Activities in the first five years constitute the Short Term Work Program. Some of the activities entail continuing existing programs while other involve changes in policy or implementation of new programs. Table 8-2 includes a summary of each of the proposed activities and programs listed by planning element (i.e. waste reduction, collection, disposal, land limitation and education and public involvement). The Table indicates the year that the activity will be implemented, the responsible party, the projected annual cost, and the potential source of funds to implement the activity.

Element/Activity	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Responsible Party	Estimated Annual Cost	Funding Source
Waste Reduction													
Continue to operate existing recycling drop-off centers in the City of Albany.	х	Х	Х	Х	Х	Х	Х	Х	Х	Х	KADB, City	\$38,986	City Enterprise Fund
Continue to operate drop-off site for recyclables at the Dougherty County landfill.	х	х	х	х	х	х	Х	Х	х	х	County	(1)	County Enterprise Fund
Open pilot drop-off center at fire station.	Х										KADB	\$	SPLOST
If successful, expand drop-off centers to fire stations throughout County.		х	х	х	х	х	х	Х	х	х	KADB	N/A	SPLOST
Continue to evaluate diversion of additional materials for which economic markets exist (i.e. collection and processing costs less than revenues gained) using DCA waste composition data, monitoring at landfill, and market data.	Х	Х	Х	Х	Х	Х	х	Х	Х	Х	County, City, KADB	(1)	County Enterprise Fund
Mulch all yard trimmings collected by City.	Х	Х	Х	Х	Х	Х	Х	х	Х	Х	City	(2)	City Enterprise Funds
Continue to mulch pallets and beneficially reuse wood chips.	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	County	(1)	County Enterprise Funds
Continue developing markets for mulch.	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	County	(1)	County Enterprise Fund
Continue citizen education contract on waste reduction with KADB.	х	Х	Х	Х	Х	Х	Х	Х	Х	Х	County	\$181,000	County Enterprise Funds

Table 8-2Implementation Strategy FY 2007- 2016

### **IMPLEMENTATION STRATEGY**

Element/Activity	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Responsible Party	Estimated Annual Cost	Funding Source
Continue to work with local industry to improve waste reduction measures.	х	Х	Х	Х	х	Х	х	Х	Х	х	KADB	(3)	County Enterprise Funds
Continue to offer electronics recycling programs with annual collection event and on-call collection for businesses.	х	Х	Х	Х	х	х	х	х	Х	Х	KADB	(3)	County Enterprise Funds
Continue to work with the Dougherty County school system and Albany State University to promote participation at drop-off center.	Х	Х	Х	Х	х	х	Х	Х	Х	Х	KADB	(3)	County Enterprise Funds
Continue to coordinate waste reduction activities through KADB.	Х	Х	Х	Х	Х	Х	х	Х	Х	Х	KADB	(3)	County Enterprise Funds
			Co	llect	ion								
Continue collecting solid waste within the City of Albany.	х	Х	х	Х	х	х	х	Х	Х	х	City	(2)	City Enterprise Fund
Continue to operate County convenience center at landfill.	х	Х	х	Х	х	Х	х	Х	Х	х	County	(1)	County Enterprise Fund
Review proposals for contractors to collect residential waste in the unincorporated County.	х										City	N/A	
Exercise option of contracting for collection in unincorporated County, as needed.As neededCityTo be determinedCity Enterprise Fund											<i>J</i>		
Expand commercial collection services in County.	х	Х	Х	Х	х	х	х	Х	Х	х	City	(2)	City Enterprise Funds
Continue disposing of all waste collected in County at County landfill.	Х	Х	Х	Х	Х	Х	х	Х	Х	Х	City	(2)	City Enterprise Funds

Element/Activity	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Responsible Party	Estimated Annual Cost	Funding Source
Contract with private companies to complement City's collection capabilities in case of disaster.	As r	ieede	d					<u>.</u>			City	To be determined	City Enterprise Fund
			Di	spo	sal								
Continue operating County landfill consistently with regulations to handle all MSW disposed from Dougherty County.	х	Х	Х	х	х	Х	Х	Х	Х	Х	County	(1)	County Enterprise Fund
Enforce requirement that all MSW be disposed at the County landfill.	х	х	х	х	х	х	Х	Х	Х	х	County, City	(1)	County Enterprise Fund
Continue developing permitted cells to handle all MSW generated in the County.	As r	neede	d								County	(1)	County Enterprise Fund
Continue developing cells to handle the C&D delivered to the landfill.	As r	leede	d								County	(1)	County Enterprise Fund
Establish host fee for all solid waste handling facilities operating in the County.	х										County	(1)	County Enterprise Fund
Monitor the economic feasibility of methane gas recovery and implement, if feasible.	х	х	х	х	х	х	Х	Х	Х	х	County	(1)	County Enterprise Fund
		La	and	Lim	itatio	on							
Maintain maps indicating the land excluded from solid waste facility development based on zoning, land use, and other factors.	Х	Х	Х	х	х	х	Х	х	Х	Х	County	(1)	County Enterprise Funds
Monitor local, state and federal regulations to ensure site suitability for future solid waste management facilities.	Х	Х	х	Х	Х	Х	Х	Х	Х	Х	County	(1)	County Enterprise Funds

### **IMPLEMENTATION STRATEGY**

Element/Activity	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Responsible Party	Estimated Annual Cost	Funding Source
Educate potential developers about the County's siting requirements and the process to demonstrate consistency with the Solid Waste Management Plan.	х	Х	Х	х	Х	х	Х	х	Х	Х	City/County	None	
Review all proposed solid waste facilities for consistency following procedures in Section 6.3.	х	х	х	х	х	х	Х	х	Х	х	City/County	None	
Enforce policy that no facilities will be sited in County without determination of consistency with this Plan.	х	х	х	х	х	х	х	х	Х	х	City/County	None	
Edu	ucat	ion a	and	Pub	lic l	nvol	ver	nen	t				
Continue contract with Keep Albany-Dougherty Beautiful for education and public involvement related to solid waste management	х	Х	Х	х	Х	х	Х	х	Х	Х	County	\$181,000	County Enterprise Funds
Develop web site about waste reduction, litter and illegal dumping, and other solid waste management issues and link to City and County solid waste departments.	х	Х									KADB	(3)	County Enterprise Funds
Conduct waste audits and "how to workshops" for business/industry.	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	KADB	(3)	County Enterprise Funds
Continue to generate a tabloid aimed at the commercial/industrial community	х										KADB	None	
Continue educational presentations and highlight successful commercial/industrial community	х	Х	Х	х	Х	Х	Х	х	Х	Х	KADB	(3)	County Enterprise Funds
Continue to develop new programs and material to promote residential recycling, as needed.	х	Х	Х	Х	Х	Х	х	Х	Х	Х	KADB	(3)	County Enterprise Funds

### Section 8

Element/Activity	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Responsible Party	Estimated Annual Cost	Funding Source
Continue to assess the extent and nature of illegal disposal within Albany-Dougherty County.	х	Х	х	Х	Х	Х	х	х	Х	х	KADB/City	(2)(3)	City/County Enterprise Funds
Continue public education programs concerning illegal disposal.	х	Х	х	Х	Х	Х	х	х	Х	х	KADB/City	(3)	County Enterprise Funds
Continue public education efforts to inform citizens on composting activities.	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	KADB	(3)	County Enterprise Funds

Cost included in the County's Enterprise Fund, which was \$3,161,794 million in FY2006.
 Costs included in the City's Enterprise Fund, which was \$7.8 million in FY2006.
 Cost included in the KADB's annual budget, \$181,000 in FY06.

# 8.3 Source of Funds

All of the solid waste operations of both Dougherty County and the City of Albany are fully funded through fees for solid waste services. The County's Solid Waste Enterprise Fund is funded by tipping fees at the landfill. The City's Solid Waste Enterprise Fund is funded through fees charged to residents and businesses for solid waste collection. These revenues support a comprehensive array of solid waste management services that enable the County and City to achieve their solid waste management goals, including supporting the activities of Keep Albany Dougherty Beautiful.

### 8.4 Plan Updates and Amendments

The implementation strategy will be reviewed on an annual basis as the County and City prepare their Annual Solid Waste Management Survey and Full Cost Report to submit to the Georgia Department of Community Affairs. The County and City will take this opportunity to determine if the goals or needs of the County and City have changed in a way that would require changes to the implementation strategy. In addition, the County and City will update the implementation strategy as part of the Short Term Work Program update. At the end of the ten-year planning period, the entire Dougherty County – City of Albany Solid Waste Management Plan will be updated.