MARSHALL COUNTY, ALABAMA



SOLID WASTE MANAGEMENT PLAN

2014

FINAL

Prepared for:

Marshall County Commission

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CHAPTER 1

INTRODUCTION

1.1 HISTORIC OVERVIEW

In 1989, the Alabama State Legislature passed Act 89-824 governing solid waste management in the State of Alabama. This Act, codified in the Alabama Solid Wastes Disposal Act₍₁₎, Code of Alabama 1975, §22-27-40 through §22-27-48, required the Director of the Alabama Department of Environmental Management (ADEM), and cities and counties of the State of Alabama to develop and adopt comprehensive Solid Waste Management Plans (SWMP or "Plan") which forecast and describe the management of solid waste generated within a local government's jurisdiction over a minimum 10-year period. This SWMP is to be utilized as a "roadmap" on how to manage solid waste facilities and services in the local jurisdiction by addressing all items required by the Alabama Solid Wastes Disposal Act.

As a result of Act 89-824 and additions to the Alabama Solid Wastes Disposal Act (later revised and now called the Solid Wastes and Recyclable Materials Management Act or SWRMMA), each county was originally required to develop and submit a SWMP to ADEM for approval in 1990. The requirements also call for each county to periodically submit an updated Plan that covers the management of solid waste generated in their jurisdiction for the next ten year period (minimum). An ADEM-approved SWMP is required before a county or municipality can grant local approval on matters related to solid waste management within their jurisdiction, and is also required to be eligible for recycling grant funds. Municipalities within each county have the option of adhering to the County's SWMP or "opting out" of the county's plan by developing and submitting their own plan to ADEM.

Marshall County has retained Engineering Service Associates, Inc. (ESA) to update their SWMP. The *Marshall County Solid Waste Management Plan* addresses the concerns of the Solid Wastes and Recyclable Materials Management Act and meets the requirement for each government's SWMP to be periodically updated.

1.2 PURPOSE OF REPORT

The purpose of this Solid Waste Management Plan is to provide for the management of solid waste within the political jurisdiction of Marshall County for the period of 2014 to 2024. This Plan will address aspects of solid waste management such as generation, collection, transportation, disposal, and recycling, and will have general applicability for the circumstances and situations that may affect solid waste management in Marshall County. In particular, the SWMP will address the following issues required by Code of Alabama 1975, §22-27-47, as applicable:

- Descriptions and explanations of the general origins and weight or volume of solid waste (household, commercial, industrial, construction/demolition, and special wastes) currently generated within the jurisdiction's boundaries.
- Current methods of collection and transportation of solid waste within the jurisdiction.
- Identification and descriptions of facilities where solid waste is currently being disposed of or processed, with estimated remaining capacities of these facilities, including municipal solid waste (MSW) landfills, Industrial landfills, Construction/Demolition (C/D) landfills, incinerators, and recycling centers.
- Identification and descriptions of current and/or planned recycling programs and the impact such recycling programs have on generated waste in the jurisdiction.
- Address the requirements of the federal Resource Conservation and Recovery
 Act, Subtitle D and explain those actions the jurisdiction should take to assure
 proper management of its waste under these requirements.
- Descriptions of current and/or planned procedures for the identification, elimination, and prevention of unauthorized dumps in the jurisdiction.
- Descriptions of the general origin and weight or volume of solid waste that is expected to be generated annually in the jurisdiction for the next ten (10) years.
- Provisions for the development or expansion of solid waste management systems
 that are consistent with the needs of the jurisdiction, while considering planning,
 zoning, population and development estimates, economics of jurisdiction and the
 protection of air, water, land and other natural resources.

- Identification of current and proposed future agreements between the jurisdiction and other units of local governments and/or authorities for the joint use or operation of solid waste facilities.
- Identification of current and proposed future contractual agreements with private operators of collection, processing, transportation, and/or disposal facilities for solid waste.
- Identification of proposed solid waste processing, disposal or recycling facilities, considering the needs of the area, the proximity to transportation routes and large solid waste generators, the cost and availability of public services, public health, safety and environmental impacts, and the social and economic impacts a proposed location would have on the affected community.
- If applicable, an explanation of why a jurisdiction proposes to utilize a solid waste facility outside its jurisdiction.

1.3 PLANNING PERIOD

All solid waste projections, analyses, recommendations and schedules will be based on the planning period of January 1, 2014 – December 31, 2024. For reporting purposes, this SWMP shall expire January 1, 2025.

1.4 METHODOLOGY

This Update generally follows a format required by ADEM with its purpose being to develop a comprehensive Solid Waste Management Plan by addressing the collection, transportation, processing, disposal and recycling of solid waste in the County. The report is outlined in the Table of Contents and addresses all concerns for a completed Solid Waste Management Plan. The heading of each section includes the addressed task required by the Code of Alabama 1975, §22-27-47.

The historical data utilized in this report was compiled for record year 2013. Preparation of the *Marshall County Solid Waste Management Plan* included:

- Meetings with ADEM to determine format and methodology of data to be included in the SWMPs.
- Identification and designation of cities and incorporated areas to be included in the SWMP.
- Review of previous Solid Waste Management Plans.
- Location and identification of existing solid waste facilities (landfills, transfer stations, recycling centers, etc.).
- Review of Alabama State Legislative documentation.
- Review of Environmental Protection Agency (EPA), Alabama Department of Environmental Management (ADEM) and local regulations governing solid waste management.
- Review of population data.
- Formal data collection and personal interviews with county personnel, contract haulers, private solid waste facility owners and operators, and local municipality personnel.

1.5 MARSHALL COUNTY MUNICIPALITIES

The following is a listing of the seven (7) municipalities currently located in Marshall County and being covered by the Marshall County Solid Waste Management Plan:

City of Albertsville City of Arab City of Boaz Town of Douglas Town of Grant City of Guntersville Town of Union Grove

Although small portions (by population) of Arab and Boaz are located in other counties, the majority population of these cities is in Marshall County. Therefore, the entire City of Arab and Boaz will be covered by the Marshall County SWMP. Although only a very small portion of the Town of Sardis City in located in Marshall County, the majority of Sardis City is located in Etowah County. Therefore Sardis City is not being included in this SWMP and it is anticipated that this municipality will be covered by the Etowah County SWMP instead.

1.6 LOCAL AND MUNICIPAL APPROVAL OF SOLID WASTE FACILITIES AND SERVICES

A local government must be subject to or covered by an approved SWMP in order to provide local approval of solid waste facilities and services within that jurisdiction. Unless a municipal government specifically elects to "opt out" of their County's SWMP, they are considered to be included in the County's Plan.

The municipal governments of Marshall County may grant local approval of solid waste management facilities and services within their municipal limits (not including the police jurisdiction) if the municipality follows all federal, state and local requirements related to the management of solid waste in Marshall County. If a municipality does grant local approval of solid waste management facilities or services, the applying entity is not required to also obtain local approval from the Marshall County Commission.

1.7 PUBLIC HEARING

As required by Alabama Law, a public hearing was held to solicit comments on the *Marshall County Solid Waste Management Plan* prior to its approval and adoption by the County Commission. Notice of the public hearing was given in a local newspaper at least thirty (30) days before the hearing date. Draft copies of the SWMP were made available to the public prior to the hearing. A copy of the public notice, public hearing sign-in sheets and the minutes of the public hearing are included in the Appendix. No comments were received during the public comment period or the public hearing.

1.8 COUNTY COMMISSION RESOLUTION

As required by Alabama Law, the *Marshall County Solid Waste Management Plan* was adopted through a resolution by the County Commission prior to submittal to the Alabama Department of Environmental Management. A copy of this Resolution is included in Appendix C.

1.9 **DEFINITIONS**

A list of terms commonly used in the field of solid waste management is included for general information (2,6):

Buffer Zone

Neutral area serving as a protective barrier separating two conflicting forces. An area that minimizes the impact of pollutants on the environment or public welfare. For example, a buffer zoned is established between a composting facility and neighboring residents to minimize odor problems.

Buy-Back Center

A facility to which individuals bring recyclables in exchange for payment.

Commercial Waste

Waste materials originating in wholesale, retail, institutional, or service establishments, such as office buildings, stores, markets, restaurants, hotels, warehouses and other non-manufacturing activities, excluding residential and industrial wastes.

Commingled Recyclables

Two or more recyclable materials collected together (i.e. not separated). In some types of collection programs, recyclable materials may be commingled, as long as they do not contaminate each other. For example, glass and plastic can be commingled, but glass and oil cannot.

Composting

The controlled biological decomposition of organic solid materials (i.e. grass clippings, food waste and lawn debris) under aerobic conditions.

Construction/Demolition (C/D) or Inert Landfill

A discrete area of land or an excavation that receives construction/demolition waste, and or rubbish and/or water treatment (alum) sludge, foundry waste meeting ADEM Rule 335-13-4-

.26(3), and that is not a land application unit, surface impoundment, or injection well as those terms are defined in this (ADEM) Rule.

Construction and Demolition Waste

Materials resulting from the construction, remodeling, repair, or demolition of buildings, bridges, pavements, and other structures. Such wastes include masonry materials, sheet rock, roofing waste, insulation (not including asbestos), scrap metal, and wood products. Uncontaminated concrete, soil, brick, waste asphalt paving, ash resulting from the combustion of untreated wood, rock, and similar materials are excluded from this definition.

Corrugated Paper

Paper or cardboard having either a series of wrinkles or folds, or alternating ridges and grooves.

Cover Material

Material, either natural soil or geosynthetic material, used in a landfill to impede water infiltration, landfill gas emissions, and bird and rodent congregation. It is also used to control odors and make the site mire visually attractive. Landfills have three forms of cover: daily cover, intermediate cover, and final cover.

Drop-Off Collection

A method of collecting recyclable or compostable materials in which the materials are taken by individuals to collection sites, where they deposit the materials into designated containers.

Ferrous Metals

Metals derived from iron. They can be removed from commingled materials using large magnets at separation facilities.

Garbage

Putrescible animal and vegetable waste resulting from handling, preparation, cooking and consumption of food, including, but not limited to, waste from markets, storage facilities,

handling and sale of produce and other food products and excepting such materials that may be serviced by garbage grinders and handles as household sewage.

Groundwater Monitoring Well

A well placed at an appropriate location and depth for taking water samples to determine groundwater quality in the area surrounding a landfill or other site.

Hazardous Waste

Waste material that exhibits a characteristic of hazardous waste as defined in RCRA (ignitability, corrosivity, reactivity, or toxicity), is listed specifically in RCRA 261.3 Subpart D, is a mixture of either, or is designated locally or by the state as hazardous or undesirable for handling as part of the municipal solid waste and would have to be treated as regulated hazardous waste if not from a household.

Household Hazardous Waste (Special Definition and Guidance)

Household hazardous waste (HHW) is any material (gas, liquid, or solid) from a home that may pose a health threat to people, animals, or the environment if handled or disposed of improperly. HHW is corrosive, flammable, toxic, or reactive, and comes from everyday products used in the home, yard, or garden. Common examples include paint, household cleaners, motor oil, pesticides, pool chemicals, products containing mercury (fluorescent bulbs, mercury thermometers) and various chemicals. Because households produce these wastes in limited quantities they are not regulated as hazardous wastes under federal and state laws.

Household hazardous waste items should never be poured on the ground, in a stream, or in a storm drainage system. If a resident has HHW that needs to be disposed of, it is recommended they contact their local government to see if the community sponsors a Household Hazardous Waste collection program. The resident can also contact their solid waste collection agency for guidance on proper disposal of HHW. If no HHW collection program is available, residents should follow the recommendations made in ADEM's brochure "Household Hazardous Waste available online Practical Management for Every Home" (Brochure at: http://adem.alabama.gov/programs/water/nps/take/householdHW.pdf). Recycling or finding

someone who can use the material is recommended first, but if this is not possible, recommendations include solidifying liquids using cat litter, sawdust or other absorbent material, followed by placing in a leak resistant bag or container before taking it to a disposal facility.

Household Waste

Any solid waste, including, but not limited to, garbage, trash, and sanitary waste in septic tanks derived from households, including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day use recreation areas. Sanitary waste in septic tanks shall be considered as household waste only when it is disposed in a landfill or unauthorized dump.

Incinerator

A facility in which solid waste is combusted.

Industrial Landfill

A discrete area of land or an excavation that receives industrial solid waste and may in addition receive construction/demolition waste and/or rubbish.

Industrial Waste

Materials discarded from industrial operations or derived from manufacturing processes and that are not regulated as a hazardous waste.

Illegal or Unauthorized Dump

Any collection of solid wastes either dumped or caused to be dumped or placed on any public or private property, whether or not regularly used, and not having a permit from ADEM. Abandoned automobiles, large appliance or similar large items of solid waste shall be considered as forming an unauthorized dump within the meaning of this Division. The careless littering of a relatively few, smaller individual items such as tires, bottles, cans and the like shall not be considered an unauthorized dump, unless the accumulation of the sold waste poses a threat to human health or the environment. An unauthorized dump shall also mean any solid waste disposal site which does not meet regulatory provisions of this Division.

Leachate

Liquid that has percolated through solid waste or another medium and has extracted, dissolved, or suspended materials from it. Because Leachate may include potentially harmful materials, leachate collection and treatment are crucial at municipal waste landfills.

Leachate Collection System

A network of pipes or geotextiles/geonets placed at low areas of the landfill liner to collect leachate from a landfill for storage or treatment. Flow of leachate along the liner is facilitated by the use of a soil drainage blanket or geonet.

Liner

A system of low-permeability soil and/or geosynthetic membranes used to collect leachate and minimize contaminant flow to groundwater. Liners may also absorb or attenuate pollutants to further reduce contamination.

Methane

An odorless, colorless, flammable, explosive gas produced by municipal solid waste undergoing anaerobic decomposition. Methane is emitted from municipal solid waste landfills.

Municipal Solid Waste (MSW)

MSW means household waste, commercial solid waste, nonhazardous sludge, conditionally exempt small quantity hazardous waste, and industrial solid waste.

Recycling

Any process by which materials are collected, separated, recovered, stored, or processed and reused or returned to use in the form of raw materials or products, but does not include the use of materials as a fuel, or for any use which constitutes disposal.

Residential Waste

Waste generated in single- and multiple-family homes.

Roll-Off Container

A large waste container that fits onto a tractor trailer that can be dropped off and picked up hydraulically.

Rubbish

Nonputrescible solid wastes, excluding ashes, consisting of both combustible and noncombustible wastes. Combustible rubbish includes paper, rags, cartons, wood, furniture, rubber, plastics, and similar materials. Noncombustible rubbish includes glass, crockery, metal cans, metal furniture and like materials which will not burn at ordinary incinerator temperatures, not less than 1600 degree F. Uncontaminated concrete, soil, brick, waste asphalt paving, ash resulting from the combustion of untreated wood, rock, yard trimmings, leaves, stumps, limbs and similar materials are excluded from this definition.

Solid Waste

Any garbage, rubbish, construction or demolition debris, ash, or sludge from a waste treatment facility, water supply plant, or air pollution control facility, and any other discarded materials, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, or agricultural operations or community activities, or materials intended for or capable of recycling, but which have not been diverted or removed from the solid waste stream. The term "solid waste" does not include recovered materials, solid or dissolved materials in domestic sewage, solid or dissolved material in irrigation return flows, or industrial discharges which are point sources subject to the National Pollutant Discharge Elimination System permits under the Federal Water Pollution Control Act, as amended, or the Alabama Waste Pollution Control Act, as amended; or source, special, nuclear, or by-product materials as defined by the Atomic Energy Act of 1954, as amended. Also excluded from this definition are land applications of crop residues, animal manure, and ash resulting exclusively from the combustion of wood during accepted agricultural operations, waste from silvicultural operations, or refuse as defined and regulated pursuant to the Alabama Surface Mining Act of 1969.

Solid Waste Management

The systematic control of solid waste including its storage, processing, treatment, recovery of materials from solid waste, or disposal.

Source Reduction

The design, manufacture, acquisition, and reuse of materials so as to minimize the quantity and/or toxicity of waste produced. Source reduction prevents waste either by redesigning products or by otherwise changing societal patterns of consumption, use, and waste generation.

Special Waste

Those wastes requiring specific processing, handling or disposal techniques as determined necessary by the Department which are different from the techniques normally utilized for handling disposal. Examples of such waste types may include, but are not limited to mining waste; fly ash; bottom ash; sludges; friable asbestos; industrial waste; liquid waste; large dead animals or large quantities of dead animals; and residue, medical waste, foundry waste, petroleum contaminated wastes, municipal solid waste ash, or contaminated soil and water from the cleanup of a spill.

Subtitle D

The solid, nonhazardous waste section of the Resource Conservation and Recovery Act (RCRA) of 1976.

Tipping Fee

A fee charged for the unloading or dumping of material at a landfill, transfer station, recycling center, or waste-to-energy facility, usually stated in dollars per ton. (Sometimes called a disposal or service fee.)

Transfer Station

A permanent facility where waste materials are taken from smaller collection vehicles and placed in larger vehicles for transport, including truck trailers, railroad cars, or barges. Recycling and some processing may also take place at transfer stations.

White Goods

Large household appliances such as refrigerators, stoves, air conditioners, and washing machines.

Yard Trimmings

Leaves, grass clippings, prunings and other natural organic matter discarded from yards and gardens. Yard trimmings may also include stumps and brush, but these materials are not normally handled at composting facilities.

CHAPTER 2

SOLID WASTE GENERATION

Section 22-27-47(b)(1): Describe and explain the general origin, and weight or volume of solid waste currently generated within the jurisdiction's boundaries.

2.1 MUNICIPAL SOLID WASTE GENERATION

2.1.1 Household Waste Generation

Household waste such as garbage and trash is collected from residences in Marshall County either by a private contractor or the municipality provides their own residential collection services. According to survey results, approximately **26,843 tons** of household waste was reported as being generated in Marshall County in 2013.

Table 2-1 presents a summary of the municipalities, estimated population served, collection agency, amount of household waste collected, and the calculated per capita generation rate. The waste generated is totalized on the last line and an average household per capita generation rate is calculated using the total population for the "covered areas" of the County.

TABLE 2-1 HOUSEHOLD WASTE GENERATION

Service Area	2013	Solid Waste	Waste (Generation Rate	
	Population Collection Agency		TPY	TPD	PCD
Albertville	21,943	City of Albertville	6,410	17.56	1.60
Guntersville	8,500	City of Guntersville	3,018.05	8.27	1.95
Arab, Boaz, Douglas, Grant, Union Grove, Unincorporated Marshall County	67,189	Allied Waste (Republic Services)	17,414.85	47.7	1.42
Marshall County "Covered Area" Totals:	97,632		26,842.9 TPY	73.5 TPD	1.51 PCD

Source: The information in this Table was provided by the solid waste collection agency and/or disposal site. TPY = Tons Per Year, TPD = Tons Per Day, PCD = Pounds Per Capita Per Day

2.1.2 Commercial Waste Generation

Commercial solid waste in the county is typically collected by the municipality or by private collection agencies. In 2013, approximately **24,448 tons** of commercial waste was reported as being generated in Marshall County. Table 2-2 presents a summary of the municipalities, estimated population served, collection agency, amount of commercial waste collected, and the calculated per capita generation rate. The waste generated is totalized on the last line and an average per capita commercial generation rate is calculated using the total population for the "covered areas" of the County.

TABLE 2-2
COMMERCIAL WASTE GENERATION

Service Area	2013	Solid Waste			Generation Rate	
	Population	Collection Agency			PCD	
Guntersville	8,500	City of Guntersville	2,977.54	8.16	1.92	
Albertville, Arab, Boaz, Douglas, Grant, Union Grove, Unincorporated Marshall County	89,132	Allied Waste (Republic Services)	21,470	58.82	1.32	
Marshall County "Covered Area" Totals:	97,632		24,447.54 TPY	66.98 TPD	1.37 PCD	

Source: The information in this Table was provided by the solid waste collection agency and/or disposal site. TPY = Tons Per Year, TPD = Tons Per Day, PCD = Pounds Per Capita Per Day

2.1.3 Municipal Solid Waste Generation

By combining the Household Waste and Commercial Waste, the total amount of Municipal Solid Waste (MSW) generated can be calculated. In 2013, approximately **51,290 tons of MSW** was reported as being generated in Marshall County. This equates to an overall municipal solid waste generation rate of 2.88 lbs/capita/day.

2.2 CONSTRUCTION/DEMOLITION (C/D) WASTE GENERATION

Construction and demolition (C/D) wastes are typically generated by the construction, remodeling, repair or demolition of structures, roads, sidewalks, utilities, etc. Other inert

material such as yard wastes (i.e. leaves, limbs, grass clippings) may also be considered as C/D waste. Since these wastes are relatively inert materials and C/D landfills do not have to meet the strict design standards required for municipal household wastes, many municipalities and private entities operate their own C/D landfills.

In 2013, approximately **10,344 tons** of construction/demolition (C/D) waste was reported as being generated in Marshall County. Table 2-3 presents the estimated population served, the collection agency, the amount of C/D waste collected, and the calculated per capita generation rate. The waste generated is totalized on the last line and an average per capita C/D generation rate is calculated using the "covered area" population for Marshall County.

TABLE 2-3
CONSTRUCTION/DEMOLITION WASTE GENERATION

Service Area	2013	Solid Waste	Waste Generation Rate		
	Population	Collection Agency	TPY	TPD	PCD
Albertville	21,943	City of Albertville	2,346	6.43	0.59
Arab	8,348	City of Arab	1,500	4.11	0.98
Guntersville	8,500	City of Guntersville	6,318	17.31	4.07
Marshall County	07.622	B&B Tire Landfill	126.95	0.40	
"Covered Area"	97,632	Allied Waste (Republic Services)	53.47	0.49	0.01
Marshall County "Covered Area" Totals:	97,632		10,344 TPY	28.34 TPD	0.58 PCD

Source: The information in this Table was provided by the solid waste collection agency and/or the disposal site. TPY = Tons Per Year, TPD = Tons Per Day, PCD = Pounds Per Capita Per Day

2.3 INDUSTRIAL WASTE GENERATION

Solid waste that is generated by an industry may be collected by a private company and taken to an appropriate landfill, or it may be collected by that industry and disposed of in their own landfill, if applicable. In 2013, approximately **30,777 tons** of industrial waste was reported as

being generated in Marshall County. Table 2-4 presents a summary of the estimated population served, the collection agency, the amount of industrial waste collected, and the calculated per capita generation rate.

TABLE 2-4
INDUSTRIAL WASTE GENERATION

Service Area	2013	Solid Waste	Waste Generation Rate		
Service fire	Population	Collection Agency	TPY	TPD	PCD
		Allied Waste (Republic Services)	20,136.77	55.17	1.13
Marshall County "Covered Area"	97,632	Sand Mountain Landfill	-	-	-
		Mueller Co. Industrial Landfill	10,640	29.15	0.60
Marshall County "Covered Area" Totals:	97,632		30,776.77 TPY	84.32 TPD	1.73 PCD

Source: The information in this Table was provided by the solid waste collection agency and/or disposal site. TPY = Tons Per Year, TPD = Tons Per Day, PCD = Pounds Per Capita Per Day

2.4 SPECIAL WASTE GENERATION

"Special waste" primarily consists of waste which is not regulated as hazardous waste and has physical or chemical characteristics, or both, that are different from municipal, demolition, construction and wood wastes and which potentially requires special handling. Examples include: contaminated soil, raw animal manure, incinerator ash, industrial or manufacturing process waste and sludge, wastewater and water treatment plant sludge and large quantities of dead animals.

According to survey results, there was no special waste generated or disposed of in Marshall County in 2013.

CHAPTER 3

SOLID WASTE COLLECTION AND TRANSPORTATION

Section 22-27-47(b)(2): *Identify current methods of collection and haulage (transport) of solid waste within the jurisdiction.*

3.1 GENERAL

Unincorporated Marshall County and all the municipalities covered by the county's Plan require mandatory participation in a solid waste collection program. The solid waste generated in Marshall County is typically collected by individual municipalities or private haulers (contractors) and then transported to an appropriate Transfer Station or landfill for disposal.

3.2 MUNICIPAL SOLID WASTE (HOUSEHOLD AND COMMERCIAL)

Household solid waste is typically collected using either rear loading or side loading semi-automatic compactor trucks. Depending on the type of business and the amount of solid waste generated each week, commercial solid waste is either collected along with household waste or separately using roll-off containers or front loading compactor trucks for dumpsters. A listing of each municipality in Marshall County and its method of municipal solid waste collection and haulage during 2013 is presented below.

3.2.1 Service Areas

Albertville

In 2013, the City of Albertville Sanitation Department provided weekly residential solid waste collection services in the corporate city limits and Republic Services (d.b.a. as Allied Waste) provided commercial collection services in the City of Albertville. Beginning in March 2014, Albertville began outsourcing its weekly residential solid waste collection to Allied Waste under a new three (3) year contract. The contract does not affect commercial solid waste collections in Albertville. The household and commercial solid waste is compacted during collection and transported to the BFI (Republic Services) Marshall County Transfer Station in Albertville.

Arab

Mandatory residential solid waste collection is provided once a week by Republic Services (d.b.a. as Allied Waste) under a contract with the City of Arab. Commercial solid waste collection is also being provided by Republic; however, this service is not a part of the city's contract. The solid waste is compacted during collection and transported to the BFI (Republic Services) Marshall County Transfer Station in Albertville.

Boaz

Mandatory residential solid waste collection is provided once a week by Republic Services (d.b.a. as Allied Waste) in Boaz. These services are provided through a contract between the City of Boaz and Republic. Commercial solid waste collection is also being provided by Republic; however, it is not covered by the city's contract. The solid waste is compacted during collection and transported to the BFI (Republic Services) Marshall County Transfer Station in Albertville.

Guntersville

The City of Guntersville Sanitation Department provides mandatory weekly residential and commercial solid waste collection services in the City of Guntersville. The solid waste is compacted during collection and transported to the BFI (Republic Services) Marshall County Transfer Station in Albertville.

Unincorporated Marshall County and Other Municipalities

Republic Services (d.b.a. as Allied Waste) provides mandatory garbage collection for Douglas, Grant, Union Grove, and the unincorporated areas of Marshall County. Residential collection services are provided under a contract between Marshall County and Republic Services. Commercial businesses are allowed to utilize any collection agency, but only Republic (d.b.a. as Allied Waste) reported providing commercial services in Marshall County. The solid waste is compacted during collection and transported to the BFI (Republic Services) Marshall County Transfer Station in Albertville.

3.3 CONSTRUCTION/DEMOLITION SOLID WASTE

Construction/demolition (C/D) wastes are typically collected and transported to a C/D landfill by a private homeowner, municipality or contract hauler. Other inert material such as yard wastes may also be taken to a C&D landfill for disposal. C/D material is typically taken to a landfill or transfer station by pick-up truck, dump truck, trailer, or roll-off container.

3.3.1 Municipalities

Albertville

Until very recently, the City of Albertville provided a "drop box" (dumpster) at the Public Works Facility for residents to dispose of bulk inert materials as needed. This service was stopped when Albertville began outsourcing its residential solid waste collections to Republic Services/Allied Waste.

Albertville also provides curbside collection of yard waste such as grass clippings, leaves, brush and limbs. This material is taken to the City of Albertville Inert Landfill where it is burned in a small brush incinerator and the ash is disposed of in the landfill.

Arab

The Arab Street Department provides monthly curbside collection of leaves, brush and trash. This waste is taken to the city's C/D landfill for disposal. Inert material is also delivered to the landfill by various individuals or collection agencies.

Boaz

The Boaz Street Department provides curbside collection of yard waste, white goods, and bulk waste such as furniture, carpet, etc. The yard waste is either incinerated or composted and the resulting mulch is available to city residents free of charge. The remaining bulk waste is placed in roll-off containers and Republic empties these containers during their contracted collection services. This bulk waste is then taken to the Marshall County Transfer Station in Albertville.

Guntersville

The City of Guntersville Public Works Department provides bi-weekly curbside collection of yard waste and bulk items such as grass clippings, leaves, brush, limbs, appliances, furniture, carpet, etc. This waste is taken to the Guntersville C/D Landfill for disposal.

3.3.2 Private Haulers

Republic Services (d.b.a. as Allied Waste) reported collecting and transporting a small amount of C&D waste that was generated in Marshall County in 2013. This waste was taken to the BFI (Republic Services) Marshall County Transfer Station in Albertville.

The B&B Tire Landfill also received C&D waste generated from within Marshall County in 2013. Tires and similar material is typically delivered to the landfill by private hauling contractors.

3.4 INDUSTRIAL SOLID WASTE

Republic Services (d.b.a. as Allied Waste) is the only collection agency that reported collecting industrial waste separate from municipal solid waste in Marshall County in 2013. This material was taken to the BFI (Republic Services) Marshall County Transfer Station in Albertville.

The Mueller Company, located in Albertville, also transported industrial waste generated by their processes to their Mueller Company Industrial Landfill in 2013.

Although the Sand Mountain Landfill is an industrial landfill located in Albertville that was permitted to accept waste from Alloy Resources, Inc., there has been no waste disposed of in this landfill for several years.

3.5 SPECIAL WASTE

Special wastes are typically generated very randomly and in small quantities, and can be collected and transported to a Municipal Solid Waste (MSW) landfill by either a municipality, county, business, or contract hauler. Various methods are used for the transport of Special Wastes but typically involve dump trucks or appropriate containerization (i.e. drums) and

transport in trucks or tractor trailers. Roll-off containers may also be used in the collection and transport of special wastes.

According to survey results, there was no special waste collected or transported in Marshall County in 2013.

CHAPTER 4

SOLID WASTE FACILITIES

Section 22-27-47(b)(3): Identify and describe the facilities where solid waste is currently being disposed or processed and the remaining available permitted capacity of such facilities and the capacity which could be made available through the reasonable expansion of such facilities. The plan shall also explain the extent to which existing facilities will be used during the life of the plan and shall not substantially impair the use of their remaining capacity.

4.1 GENERAL

In 2013, one MSW landfill, several C/D landfills, and one Industrial landfill were used for the disposal of solid waste generated in Marshall County. A transfer station was also used to consolidate the municipal solid waste prior to transport to the MSW landfill. It is anticipated that these facilities will continue to be utilized during the life of this Plan, as long as capacity remains available.

4.2 MUNICIPAL SOLID WASTE LANDFILLS

4.2.1 GEK - Sand Valley Landfill (Permit #25-04)

The GEK - Sand Valley Landfill, located at 3345 County Road 209, Collinsville, DeKalb County, Alabama is designated to accept waste from Blount, Cherokee, Clay, Cleburne, DeKalb, Etowah, Jackson, Marshall, Randolph, St. Clair and Talladega Counties of Alabama; Chattooga, Dade, Polk, and Walker Counties of Georgia; and Hamilton County of Tennessee. This landfill is owned and operated by GEK, Inc., a wholly owned subsidiary of Republic Services. The permitted capacity of this Landfill is 1,500 tons of solid waste per day. In 2013, approximately 417,000 tons of solid waste was disposed of in this landfill (75,239 tons were from Marshall County).

"Reasonable expansion" activities at the Sand Valley Landfill include constructing additional disposal cells that have already been permitted. Taking into consideration these reasonable expansion activities and the 2013 disposal rate, approximately 50 years of disposal capacity remain at this landfill.

4.2 CONSTRUCTION AND DEMOLITION LANDFILLS

4.2.1 City of Albertville Inert Landfill (Permit #48-02)

The City of Albertville Inert Landfill is designated to accept waste from the City of Albertville and Marshall County only. The landfill is owned and operated by the City and the permitted capacity is 100 cubic yards per day. At this time, incinerator ash from the brush/vegetation incinerator is the only material currently being disposed of at this landfill and survey results indicated that approximately 33 tons of incinerator ash was disposed of in 2013.

The Albertville Inert Landfill is currently expanded to its vertical limit with no plans or ability to expand further. It is estimated that only one (1) year of disposal capacity remains available at this landfill. Once this landfill has reached capacity, the City plans to start taking its incinerator ash to the BFI Marshall County Transfer Station for disposal.

4.2.2 Arab C/D Landfill (Permit #48-03)

The Arab C/D Landfill is designated to accept waste from the City of Arab and Blount, Cullman, Marshall, Madison, and Morgan Counties. The landfill is owned and operated by the City of Arab and the permitted capacity is 500 cubic yards per day. In 2013, approximately 2,750 tons of C/D waste was disposed of at this landfill. Of this total, it is estimated that approximately 1,500 tons were generated in Marshall County, and the remainder was generated in the other counties in the service area. Considering the total 2013 disposal rate, approximately 18 years of capacity remains in the currently usable disposal cells. However, an additional 20 acres has been permitted for the construction of a future C/D cell which, once constructed, would increase the disposal capacity to approximately 35 years.

4.2.3 Guntersville Landfill (Permit #48-11)

The Guntersville Landfill, located on Highway 79 in Marshall County, is permitted to accept C/D material generated within the city limits of Guntersville only. The landfill is owned and operated by the City and has a permitted capacity of 200 cubic yards per day. In 2013, approximately 6,318 tons of C/D waste was disposed of in this landfill. Considering the currently permitted area, approximately 12 years of capacity remain available for disposal.

However, the city could purchase 20 acres adjacent to the existing landfill which, once permitted and constructed, would increase the disposal capacity to at least 30 years.

4.2.4 B&B Tire Landfill (Permit #05-07)

The B&B Tire Landfill located in Blount County is designated to accept C/D waste (tires, tire parts, conveyor belts and rubber parts) from the State of Alabama. In 2013, the permitted service area was extended to include the states of Georgia, Mississippi, Tennessee and Kentucky. The Permittee is James E. and Barbara L. Adams and the permitted volume for this landfill is 100 tons per day. According to ADEM records, approximately 16,916 tons of C/D waste from multiple Alabama counties and other states were disposed of at this landfill in 2013. Considering the permitted capacity of 100 tons per day (25,500 tons per year), at least 16 years of disposal capacity remain. This landfill is currently expanded to capacity with no more room available for future expansion.

4.3 INDUSTRIAL LANDFILLS

4.3.1 Sand Mountain Landfill (Permit #48-08)

The Sand Mountain Landfill, located in Albertville, is an Industrial Landfill designated to accept waste from Alloy Resources, Inc. in Marshall County. This landfill is owned and operated by Sand Mountain Investments LLC, a subsidiary of Griffin Brothers Companies. The permitted capacity of this landfill is 140 tons of solid waste per day. Acceptable materials to be disposed of in the landfill consist of specific non-hazardous wastes resulting from industrial processes, floor sweepings and similar type wastes.

ADEM records indicate that there was no solid waste disposed of in this landfill in 2013. In fact, there has been no solid waste disposed in this landfill for several years. ADEM has notified Griffin Brothers Companies that: (1) the permit for the landfill will expire on September 13, 2014; (2) ADEM is not planning on renewing the permit for the Sand Mountain Landfill; and (3) that the owner must begin closure activities within thirty (30) days of permit expiration. Attempts to talk with someone at Griffin Brothers Companies about this landfill were unsuccessful.

4.3.2 Mueller Company Industrial Landfill (Permit #48-10)

The Mueller Company Industrial Landfill, located in Albertville, is designated to accept waste from the Mueller Company - Albertville Plant. This landfill is owned and operated by Mueller Company and has a permitted capacity of 90 tons of solid waste per day. Acceptable materials to be disposed of in the landfill consist of specific non-hazardous wastes resulting from industrial processes, floor sweepings and debris, and similar type materials. According to ADEM records, approximately 10,640 tons of C/D waste was disposed of in this landfill in 2013. At this rate, approximately 15 – 20 years of disposal capacity remains at this landfill.

4.4 SOLID WASTE TRANSFER STATIONS

BFI Marshall County Transfer Station

The BFI Marshall County Transfer Station, located at 224 Rives Road in the City of Albertville, is owned and operated by Republic Services. In 2013, approximately 107,837 tons of solid waste was processed at this transfer station and transported to the GEK - Sand Valley Landfill in DeKalb County.

4.5 INCINERATORS

There are currently no municipal solid waste incinerators located in Marshall County; however, the decision to construct an incinerator in the jurisdiction shall remain a valid solid waste management option available to the County and its municipalities.

CHAPTER 5

RECYCLING

Section 22-27-47(b)(4): Provide a description of current or planned recycling programs and an analysis of their impact on waste generated within the jurisdiction. Particularly regarding recycling, the plan shall describe and evaluate:

- a. Potential benefits of recycling, including the potential solid waste reduction and the avoided cost of municipal waste processing or disposal.
- b. Existing materials recovery operations and the kind and weight or volume of materials recycled by the operations, whether public or private.
- c. The compatibility of recycling with other waste processing or disposal methods used in the jurisdiction including methods of collecting recyclables.
- d. Options for cooperation or agreement with other jurisdictions for the collection, processing and sale of recyclable materials.

5.1 GENERAL

Waste minimization and recycling efforts, which ultimately decrease the amount of solid waste deposited into landfills, are important aspects of solid waste management. In areas with adequate recyclable markets, typical recyclable materials include:

- Plastics plastic containers (type 1 or type 2 milk, soap, juice, water, etc.), grocery sacks (type 2 or 4); and other plastics (toys, plastic hangers, baskets, etc.)
- Glass unbroken glass containers, bottle glass
- Metals ferrous (steel and tin food containers, scrap metal); non-ferrous (aluminum, brass, copper)
- Paper white office paper, corrugated cardboard, newspapers, phone books,
 mixed paper (dry magazines and packing, junk mail)
- White Goods large household appliances (washing machines, refrigerators, heat pumps, air conditioners)
- Batteries dry cell, rechargeable, automotive, button, lead-acid

- Motor oil
- Tires
- Computers, printers, cartridges, and computer accessories
- Building Materials
- Cell Phones
- Polystyrene Packing Material ("Peanuts")

5.2 BENEFITS OF RECYCLING

The benefits of recycling efforts include:

- Reduces the amount of solid waste that is being handled and processed by solid waste collectors.
- Reduces the amount of waste that requires disposal, therefore reserving valuable landfill space for those materials that must be disposed of in landfills.
- Reduces the amount of materials such as white goods, tires, motor oil and other litter that may otherwise end up in the environment, groundwater, or waterways.
- Reduces energy use and associated pollution and greenhouse gas emissions.
- Saves valuable resources such as raw materials and natural resources which are used in the production of materials that could be recycled.
- Reduces overall cost for municipal waste processing and disposal.
- Provides business and job opportunities.

5.3 CURRENT RECYCLING PROGRAMS

There are several recycling programs currently in operation in Marshall County. By offering these programs, valuable landfill space and natural resources that are used in the production of these materials are saved. In addition, the cost to process or dispose of this solid waste has been avoided due to the materials being recycled. The method of collecting recyclables and its compatibility with other waste processing or disposal methods is described below. A breakdown of the types and quantities of materials recycled in 2013 is given in Table 5-1.

5.3.1 Marshall County

Marshall County provides containers at their County District Shops for citizen drop-off of recyclables such as glass, plastic, paper, etc. Recycling trailers for small items are provided year-round and dumpsters for larger items are provided for a few days each quarter for citizens to use. These materials are processed by the City of Guntersville.

5.3.2 Municipalities

Albertville, Boaz, Douglas and Grant

The Albertville Boaz Recycling Center is located at 311 Sand Mountain Drive SE in Albertville. Local citizens can deliver recyclables to the Center, such as newspaper, mixed paper, cardboard, aluminum, glass, plastic, electronics, scrap metals and styrofoam. The Recycling Center is typically open six days a week for residential drop-off of these materials. Recycling trailers are also placed at area businesses and schools with access available 24 hours a day, 7 days a week. In 2013, over 2,500 tons of materials were recycled from Albertville and Boaz through these efforts (see Table 5-1 for a breakdown of the material types and quantities). These materials are sold to various recycling brokers and mills.

Beginning in March 2014, bi-weekly curbside recycling is also available to residents in Albertville under the city's solid waste collections contract with Republic Services (Allied Waste). Any materials collected are taken to the BFI Recyclery in Huntsville, AL for processing and recycling.

Arab

Republic Services (d.b.a. Allied Waste) provides bi-weekly curbside recycling under the residential solid waste collections contract with the City of Arab. The types of materials being recycled in Arab include paper, cardboard, plastic and aluminum. In 2013, approximately 124.45 tons of these materials were collected and taken to the BFI Recyclery in Huntsville, AL for processing and recycling (see Table 5-1 for a breakdown of the material types and quantities).

Any metals received at the Arab C/D Landfill are also removed from the waste stream and put aside for future recycling. However, records are not kept at the landfill on the total amount of metals recycled each year.

Guntersville

The City of Guntersville currently provides residential curbside collection of recyclable materials such as paper, cardboard, aluminum, glass, plastic, and ferrous metals on a weekly basis. Blue bags are available at various locations throughout the city for residents to place their recyclable items in. In addition, containers are provided for citizen drop-off of these materials at the Guntersville Recycling Center located at 3450 Wyeth Drive and at the Marshall County District Shops.

In 2013, approximately 1,059 tons of materials were removed from the waste stream and recycled (see Table 5-1 for a breakdown of the material types and quantities). This material is sold to various recycling brokers.

TABLE 5-1
2013 MARSHALL COUNTY RECYCLING

MATERIALS RECYCLED	Albertville Boaz Recycling Center (TPY)	City of Arab – Republic (TPY)	Guntersville Recycling Center (TPY)
Newspaper	138	62	77.95
Cardboard	1,744	35	619.87
Mixed Paper	135	6	140.8
Aluminum	33	8	7.8
Glass	60	ı	111.64
Plastic	127	13.45	79.36
Ferrous Metals	338	-	21.7
Other Metals	=	-	-
Electronics	1	-	-
Styrofoam	5	-	-
TOTAL, TPY:	2,581	124.45	1,059.12

TPY = Tons per year

5.3.3 Private Industry Programs

Grocery, Retail and Home Improvement Industry

Several supermarkets, retail, and home improvement stores in Marshall County currently recycle plastic bags, batteries and/or corrugated cardboard. The material is typically picked up at each store location by various private recyclers. Since records of recycled amounts are not readily available, no attempt was made to quantify the amount of these materials currently being recycled by this industry in Marshall County.

Automotive Industry

Numerous automotive service stores in Marshall County currently recycle used motor oil and automotive batteries. Since records of recycled amounts are not readily available, no attempt was made to quantify the amount of these materials currently being recycled by this industry in Marshall County.

5.4 PLANNED RECYCLING PROGRAMS

Marshall County and its municipalities are already well-served by existing recycling programs; therefore there are currently no known additional programs planned in the County. Even so, each government recognizes the benefits and need for recycling efforts in their jurisdiction and the option to start or change a recycling program shall remain available to the jurisdictions throughout the planning period of this SWMP.

5.5 EXISTING JOINT VENTURES FOR RECYCLING

There are currently no formal recycling joint ventures between Marshall County and any other private operator, unit of government, or non-profit organization for the collection, processing or sale of recyclable materials. However, Marshall County does allow the City of Guntersville to place recycling trailers at their District Shops for citizen drop-off of recyclables.

The cities of Albertville and Boaz operate the Albertville Boaz Recycling Center as a joint venture agreement between the two municipalities. Each municipality contributes monetarily to the recycling center and provides labor through community service workers and city jail inmates.

5.6 FUTURE JOINT VENTURES FOR RECYCLING

Each governmental entity (i.e. County, municipalities, schools, etc.) in Marshall County recognizes the benefits and need for recycling efforts in the County; therefore, the option to enter into or change recycling joint ventures in the future shall remain available to each jurisdiction throughout the planning period of this SWMP.

It is also recognized that multi-jurisdictional recycling programs are beneficial in increasing participation in recycling while decreasing overall costs, so the option to enter into additional multi-jurisdictional agreements shall also remain available to each entity covered by the SWMP.

5.7 IMPACT OF RECYCLING ON WASTE GENERATED

According to survey results, at least 3,765 tons of materials were removed from the waste stream through recycling efforts in Marshall County in 2013. Due to these recycling efforts, the overall tonnage of solid waste disposed of in a landfill was reduced, thereby conserving valuable landfill space. Waste management costs (collection, transportation, processing and disposal) are also reduced by removing these materials from the waste stream.

RCRA SUBTITLE D REQUIREMENTS

Section 22-27-47(b)(5): Address the requirements proposed under Subtitle D of the federal Resource Conservation and Recovery Act, 42 U.S.C. Section 6941 as amended and identify and explain those actions the jurisdiction should take to assure proper management of its wastes under these requirements.

6.1 RCRA SUBTITLE D REQUIREMENTS

The Resource Conservation and Recovery Act (RCRA), an amendment to the Solid Waste Disposal Act, is the principal federal law in the United States governing the disposal of solid waste and hazardous waste. RCRA was enacted in 1976 to:

- Protect human health and the environment from the potential hazards of waste disposal;
- Conserve energy and natural resources;
- Reduce the amount of waste generated; and
- Ensure that wastes are managed in an environmentally sound manner.

Enacted in 1984, the Subtitle D amendment to RCRA deals with nonhazardous solid waste management and designates the state and local governments as the primary planning, permitting, regulating, implementing, and enforcement agencies for the management and disposal of household and industrial or commercial non-hazardous solid wastes. Minimum nationwide standards have been developed under Subtitle D that include specific requirements for the proper design and operation of MSW landfills and other solid waste disposal facilities. These requirements include location restrictions, facility design (liner, leachate collection, run-off controls, etc) and operating criteria, groundwater and landfill gas monitoring requirements, corrective action requirements, financial assurance requirements, and closure and post-closure care requirements. Most states (including Alabama) have adopted these criteria into their state solid waste management programs. In addition to the minimum federal criteria, states may also impose requirements that are more stringent than the federal requirements.

6.2 JURISDICTIONAL ACTIONS TO ASSURE PROPER MANAGEMENT OF SOLID WASTES

Marshall County and its municipalities all require mandatory residential solid waste collection in their jurisdiction. All municipal solid waste is disposed of in an MSW landfill that has been designed in accordance with Subtitle D regulations.

In addition, several municipalities in Marshall County collect inert materials separately from municipal solid waste. This material is taken to the local transfer station or C/D landfill for proper disposal.

UNAUTHORIZED DUMPS

Section 22-27-47(b)(6): Propose procedures for the identification and elimination of unauthorized dumps in the jurisdiction:

7.1 PROCEDURES FOR IDENTIFYING UNAUTHORIZED DUMPS

Unauthorized or illegal dumps are typically reported by citizens, County employees, or law enforcement personnel. Marshall County actively investigates illegal dump sites and prosecutes illegal dumpers in accordance with Alabama's Criminal Littering statute, 13A-7-29. This law provides for a "rebuttable presumption" of guilt for those whose names appear in the garbage on some official document, such as a utility bill or tax record. Suspects are interviewed to allow them an opportunity to explain why their name was in the refuse prior to charges being filed. Suspects are also encouraged to clean up their site in return for non-prosecution or the recommendation of a lighter sentence from the judge.

7.2 PROCEDURES FOR THE ELIMINATION OF UNAUTHORIZED DUMPS

County crews can be used to clean up some unauthorized dump sites, if they are located in the road right-of-way. Once a problematic area has been cleaned, fencing or other barriers and/or "No Dumping" signs can be installed. County deputies also patrol problematic areas to discourage illegal dumping.

Qualifying unauthorized dump sites can also utilize ADEM's Solid Waste Fund (SWF) Site Remediation Program to clean up and properly dispose of illegally dumped material.

As mentioned previously, several municipalities in Marshall County also collect or pick up inert materials on a regular basis which keeps these kinds of materials from being discarded along roadways.

SOLID WASTE GENERATION PROJECTIONS

Section 22-27-47(b)(7): Describe and explain the general origin and weight or volume of solid waste reasonably expected to be generated within the jurisdiction annually during the next 10 years. The assessment shall describe the primary variables affecting this estimate and the extent to which they can reasonably be expected to affect the estimate.

8.1 GENERAL

Historically, nationwide per capita municipal solid waste generation rates increased steadily from 1960 (2.68 lbs/capita/day) to 1999 (4.65 lbs/capita/day), essentially leveled off between 1999 and 2005, and have decreased slightly or remained steady each year since then, resulting in a 2010 national estimate of 4.43 lbs/capita/day (5). Source reduction, increased recycling participation and the slow economy have contributed to the reduction in generation rates since 1999. According to the EPA document, *The Decision Makers' Guide to Solid Waste Management, Vol. II*, when estimating future solid waste generation quantities, "unless there is information to the contrary, it is best to assume no change in the generation rate and to develop future projections based on population projections alone" (2). Based on this statement, the per capita solid waste generation rates calculated in Chapter 2 will be used in conjunction with population projections to estimate future solid waste quantities for the planning period of this SWMP.

8.2 POPULATION ESTIMATES

Current population estimates were obtained using data from the U.S. Census Bureau and the University of Alabama's Center for Business and Economic Research (CBER) (3). CBER typically estimates county populations using five year intervals, currently from 2010 to 2040 (see Table 8.1). These estimates were used to determine yearly population totals by evenly distributing the five year change across each year of the time period. Since CBER only estimates future population changes for counties and not municipalities, the estimates given for Marshall County will be applied to the municipalities and used to estimate municipal populations for 2014 through the end of the SWMP planning period.

Table 8.1 CBER Population Projections

Population Projections	Est. Change,	Est. Change,	Est. Change,
	2010 to 2015	2015 to 2020	2020 to 2025
Marshall County (CBER)	+6.17%	+5.68%	+5.12%

According to the U.S. Census Bureau, Marshall County had a 2010 Census population of 93,019 (an additional 1,130 persons that live across the county lines in Arab and Boaz are also being included in the population projections). Using the methodology described above, CBER estimates that the population of Marshall County will increase an average of 1.23% per year between 2010 and 2015, an average of 1.14% per year between 2015 and 2020, and 1.02% for each year between 2020 and 2025. Applying these percentages to each of the covered municipalities in Marshall County results in the projected populations shown in Table 8-2 below.

8.3 ESTIMATED WEIGHT OR VOLUME OF SOLID WASTE GENERATED ANNUALLY

The current per capita solid waste generation rates calculated in Chapter 2 are used in conjunction with the estimated municipal populations from Table 8-2 to calculate projected household, commercial, C&D, Industrial and Special Waste quantities for the planning period of this SWMP. These estimates are shown in Tables 8-3 through 8-7. Since there was no Special Waste reported as being generated in Marshall County in 2013, the projected quantities of this type of waste is listed as <1 ton for each year of the planning period.

It should be noted that population data is generally not a reliable measure of future commercial and industrial solid waste production rates, since population growth or decline is not a direct measure of growth and decline in the business sector. However, since there are no long range economic projections available from the Regional Planning Commission, this is the only method available for estimating future commercial and industrial solid waste generation. Additionally, businesses and industries continually investigate techniques and technology to reuse and recycle waste products which are generated by their core processes.

TABLE 8-2
Marshall County Population Projections

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Albertville	22,204	22,465	22,720	22,975	23,231	23,486	23,741	23,984	24,228	24,471	24,714
Arab	8,447	8,546	8,643	8,740	8,837	8,934	9,031	9,124	9,216	608'6	9,401
Boaz	9,935	10,052	10,166	10,280	10,395	10,509	10,623	10,732	10,841	10,950	11,058
Douglas	781	062	662	808	817	826	835	844	852	861	698
Grant	940	156	962	973	683	994	1,005	1,015	1,026	1,036	1,046
Guntersville	8,601	8,702	8,801	8,900	8,999	760,6	9,196	9,290	9,384	9,479	9,573
Union Grove	81	82	83	84	85	98	87	88	68	06	91
Unincorporated Marshall County	47,805	48,367	48,917	49,466	50,015	50,566	51,115	51,638	52,162	52,684	53,211
Marshall County "Covered Areas" Total:	98,794	99,955	101,091	102,226	103,362	104,498	105,633	106,715	107,798	108,880	109,963

Source: Population data was derived from U.S. Census Bureau and University of Alabama Center for Business and Economic Research (CBER) data.

TABLE 8-3
MARSHALL COUNTY HOUSEHOLD SOLID WASTE PROJECTIONS BY JURISDICTION

JURISDICTION	WASTE GENERATION RATE				НОС	SEHOLD (TO	HOUSEHOLD WASTE GENERATED (TONS/YEAR)	GENER	VTED			
	(LBS/CAP/DAY)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Albertville	1.60	6,484	6,560	6,634	6,709	6,783	6,858	6,932	7,003	7,075	7,146	7,216
Arab	1.42	2,189	2,215	2,240	2,265	2,290	2,315	2,340	2,364	2,388	2,412	2,436
Boaz	1.42	2,575	2,605	2,635	2,664	2,694	2,723	2,753	2,781	2,809	2,838	2,866
Douglas	1.42	202	205	207	209	212	214	216	219	221	223	225
Grant	1.42	244	246	249	252	255	258	260	263	266	268	271
Guntersville	1.95	3,061	3,097	3,132	3,167	3,203	3,237	3,273	3,306	3,340	3,373	3,407
Union Grove	1.42	21	21	22	22	22	22	23	23	23	23	24
Unincorporated Marshall County	1.42	12,389	12,534	12,677	12,819	12,961	13,104	13,246	13,382	13,518	13,653	13,790
Marshall County "Covered Areas" Total:		27,165	27,483	27,796	28,107	28,420	28,731	29,043	29,341	29,640	29,936	30,235

Note: Waste generation rates were derived in Chapter 2.

MARSHALL COUNTY COMMERCIAL SOLID WASTE PROJECTIONS BY JURISDICTION **TABLE 8-4**

JURISDICTION	WASTE GENERATION RATE				COMIN	AERCIAI (T	COMMERCIAL WASTE GENERATED (TONS/YEAR)	E GENER	ATED			
	(LBS/CAP/DAY)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Albertville	1.32	5,349	5,412	5,473	5,535	5,596	5,658	612,5	5,778	5,837	5,895	5,954
Arab	1.32	2,035	2,059	2,082	2,105	2,129	2,152	2,176	2,198	2,220	2,243	2,265
Boaz	1.32	2,393	2,422	2,449	2,476	2,504	2,532	2,559	2,585	2,612	2,638	2,664
Douglas	1.32	188	190	192	195	197	199	201	203	205	207	209
Grant	1.32	226	229	232	234	237	239	242	245	247	250	252
Guntersville	1.92	3,014	3,049	3,084	3,119	3,153	3,188	3,222	3,255	3,288	3,321	3,354
Union Grove	1.32	20	20	20	20	20	21	21	21	21	22	22
Unincorporated Marshall County	1.32	11,516	11,652	11,784	11,916	12,049	12,181	12,314	12,440	12,566	12,692	12,819
Marshall County "Covered Areas" Total:		24,741	25,033	25,316	25,600	25,885	26,170	26,454	26,725	26,996	27,268	27,539

Note: Waste generation rates were derived in Chapter 2.

TABLE 8-5
MARSHALL COUNTY CONSTRUCTION / DEMOLITION SOLID WASTE PROJECTIONS BY JURISDICTION

JURISDICTION	WASTE GENERATION RATE			CONS	FRUCTIC	ON / DEM	CONSTRUCTION / DEMOLITION WASTE GENERATED (TONS/YEAR)	N WASTI	E GENER	ATED		
	(LBS/CAP/DAY)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Albertville	0.59	2,391	2,419	2,446	2,474	2,501	2,529	2,556	2,582	2,609	2,635	2,661
Arab	86.0	1,511	1,528	1,546	1,563	1,580	1,598	1,615	1,632	1,648	1,665	1,681
Guntersville	4.07	6,389	6,464	6,537	6,611	6,684	6,757	6,831	6,900	6,970	7,041	7,111
"Covered Area" of Marshall County	0.010	180	182	184	187	189	191	193	195	197	199	201
Marshall County "Covered Areas" Total:		10,471	10,593	10,713	10,835	10,954	11,075	11,195	11,309	11,424	11,540	11,654

Note: Waste generation rates were derived in Chapter 2.

MARSHALL COUNTY INDUSTRIAL SOLID WASTE PROJECTIONS BY JURISDICTION TABLE 8-6

JURISDICTION	WASTE GENERATION RATE				INDC	STRIAL (T	INDUSTRIAL WASTE GENERATED (TONS/YEAR)	GENER¢ \R)	TED			
	(LBS/CAP/DAY)	2014	2015	2016	2016 2017	2018	2019	2020	2021	2022	2023	2024
Marshall County "Covered Areas" Total:	1.73	31,192	31,192 31,558	31,917	32,275	32,634	31,917 32,275 32,634 32,993 33,351 33,693 34,035 34,376 34,718	33,351	33,693	34,035	34,376	34,718

Note: Waste generation rates were derived in Chapter 2.

TABLE 8-7
MARSHALL COUNTY SPECIAL WASTE PROJECTIONS BY JURISDICTION

JURISDICTION	WASTE GENERATION RATE				SP	SPECIAL WASTE GENERATED (TONS/YEAR)	WASTE GENE (TONS/YEAR)	ENERAT.	ED			
	(LBS/CAP/DAY)	2014	2015	2016	2016 2017	2018	2018 2019 2020 2021 2022	2020	2021	2022	2023	2024
Marshall County "Covered Areas" Total:	0.0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

8.4 VARIABLES THAT MAY AFFECT WASTE GENERATION ESTIMATES

Several variables exist that may affect the future solid waste quantities predicted above.

8.4.1 Population Trends

As previously mentioned, only countywide growth rates are available to project future population estimates in Alabama municipalities. Since a municipality's growth rate does not necessarily duplicate countywide growth rates, it is reasonable to assume that there will be several municipalities whose future population counts will differ from those estimated for the planning period of this SWMP. This would affect the future waste generation amounts proportionally to the population differences.

8.4.2 Municipal Solid Waste Variables

The calculated per capita household and commercial waste generation rate factors were used to calculate the projected municipal solid waste amounts for the planning period of this Solid Waste Management Plan. One assumption affecting these estimates is that the per capita waste generation rate remains constant over the planning period. Greater economic growth with concurrent job and income growth would result in more waste being generated through increased consumer spending. Conversely, if recycling programs become more widespread and/or more effective in diverting waste from disposal, then the amount of MSW generated would decrease.

8.4.3 Construction/Demolition Waste Variables

Construction/Demolition (C/D) waste quantities are primarily driven by the economy and weather. Fluctuations in the economy, especially in residential housing and commercial office construction, have a large effect on C/D waste generation. A growing economy almost always results in additional demand for new or renovated residential and commercial buildings. This activity would result in an increase in the amount of C/D waste generated in the future.

Additionally, severe weather can cause considerable damage to trees and buildings, especially in disaster areas, resulting in a short-term increase in C/D waste for disposal. Cleanup following storms typically lasts for one to two months, but can last for several months, or even years, in

severe cases. This disaster waste is very hard to predict or quantify and could have a significant effect on future C/D waste generation.

8.4.4 Industrial Waste Generation Variables

Estimates of future industrial waste quantities based on current generation rates and population projections are highly speculative. As in municipal waste generation, greater economic growth with concurrent job and income growth could result in more industrial waste being generated through increased need for consumer goods. Additionally, since many industries continually investigate techniques and technology to reuse and recycle waste products generated by their core processes, future industrial waste generation amounts could vary significantly from those calculated in this report.

8.4.5 Special Waste

Because of the random nature of Special Wastes, quantities of these types of waste are difficult to estimate. Volumes of special waste that would be disposed of in an MSW landfill tend to be small; therefore, changes in future amounts of special waste are not expected to significantly affect the total amounts of solid waste generated in Marshall County in the future.

DEVELOPMENT OR EXPANSION OF SOLID WASTE MANAGEMENT SYSTEMS

Section 22-27-47(b)(8): Provide for the development or expansion of solid waste management systems in a manner that is consistent with the needs of the area, taking into account planning, zoning, population and development estimates, and economics of the jurisdiction and the protection of air, water, land and other natural resources..

9.1 GENERAL

Proper solid waste management requires an integrated approach to addressing the needs of the jurisdiction while being protective of public and environmental health, safety and welfare.

9.1.1 SOLID WASTE DISPOSAL NEEDS OF THE AREA

The current or projected solid waste disposal need for the County can be reasonably assessed by evaluating the remaining disposal capacity for those landfills currently serving Marshall County (see Chapter 4). With the exception of the City of Albertville Inert Landfill, there currently appears to be adequate solid waste disposal capacity available to Marshall County and its municipalities for the duration of this SWMP. Once the City of Albertville's Inert Landfill has reached capacity (approximately one year), they plan to begin taking their incinerator ash to the BFI Marshall County Transfer Station. The solid waste received at this Transfer Station is taken to the GEK Sand Valley Landfill for disposal, which has more than 50 years of disposal capacity remaining.

The County or its municipalities may decide it would be advantageous to site a new landfill or processing facility in Marshall County due to collection, transportation and/or disposal costs, host government benefits (i.e. fees, taxes, etc.), increased control over solid waste management decisions, or other currently unforeseen issues. Therefore, the option to site a future landfill (either MSW, Industrial or C/D), solid waste processing facility, recycling facility, or other similar facility, shall remain available to the jurisdiction throughout the planning period of this SWMP.

9.1.2 PLANNING AND ZONING CONSIDERATIONS

Planning and Zoning is the principal means for the county to guide its future growth and achieve a logical pattern of land use and development for the county. Some of the generally accepted, specific objectives of Planning and Zoning are:

- To conserve the taxable value of land and buildings.
- To prevent overcrowding of land and buildings.
- To control pollution, noise, dust, smoke, vibration, odor, flashes of light or danger of explosion.
- To lessen or avoid congestion in the public streets.
- To promote the public health, safety, comfort, morals, and general welfare of the public and the community.

A Planning and Zoning Department or Commission typically ensures that all new development meets specific guidelines and requirements related to the adequacy of roads, parking, traffic flow, setbacks, drainage, utilities, etc. Any proposed solid waste transfer stations, disposal facilities or processing facilities shall also be located in areas that are appropriately zoned for each type of facility, as applicable.

9.1.3 LOCAL ECONOMICS AND POPULATION / DEVELOPMENT ESTIMATES

The entire nation has been significantly affected by an economic downturn over the past several years. While slight economic growth is starting to occur, it is not expected to increase to the extent that it would significantly impact solid waste management systems and remaining disposal capacities in the area during the life of this SWMP.

Even considering the information presented above, unforeseen circumstances during the next ten years may lead to the need for additional solid waste disposal or processing facilities in the County due to increased population or commercial development. The County may also wish to consider locating solid waste processing or disposal facilities within its jurisdiction due to host government benefits (i.e. fees, taxes, etc.) that would be received from these types of facilities.

9.1.4 PROTECTION OF AIR, WATER AND NATURAL RESOURCES

State and Federal Regulations regarding the siting, design, construction and operation of solid waste processing and disposal facilities are in place to protect air, water and natural resources. These Regulations which safeguard against health, safety and environmental concerns involve:

- Buffer zones
- Minimum separation from groundwater
- Storm water run-on/run-off
- Liners, if applicable
- Leachate collection systems, if applicable
- Gas monitoring systems, if applicable
- Daily cover of solid waste

In regards to landfills, the use of properly installed cover material greatly reduces landfill odors and wind blown debris. In addition, groundwater is less likely to become contaminated due to the installation of clay liners, geotextile fabric and leachate collection systems. Creeks, streams and other environmentally sensitive areas are protected from excessive stormwater runoff through the use of detention or retention ponds. By following ADEM and EPA guidelines, safeguards against health, safety, and environmental concerns can be achieved while protecting air, water, land and other natural resources.

9.2 CONSIDERING HOST GOVERNMENT APPROVAL FOR PROPOSED NEW SOLID WASTE FACILITIES

The Marshall County Commission shall consider approval of proposed solid waste facilities or services in unincorporated Marshall County. A municipal government which is subject to and covered by the County's SWMP may consider and grant local approval of solid waste management facilities and services within their municipal limits only. If the municipality does grant local approval of solid waste management facilities or services, the applying entity is not required to also obtain local approval from the County Commission. If requested, proposed facilities to be located within a municipality's limits will only be considered by the County

Commission after they are petitioned by the City Council to approve said facility/site and an appropriate review fee is negotiated.

Appendix A contains the application that must be submitted by a proposed solid waste facility when requesting host government approval. An Application Fee equal to 20 percent of the application or permit fee required by ADEM will be required to be submitted with the application (unless waived by the host government) and the entity proposing the solid waste facility shall supply the information requested in the application. It is important to note that neither the County nor its municipalities will be reviewing the application for technical compliance with Subtitle D requirements. This level of technical review is reserved for ADEM. Instead, the host government shall provide a review by whatever method it deems necessary to assure the proper management of solid wastes generated within its jurisdiction.

JOINT USE OF SOLID WASTE FACILITIES

Section 22-27-47(b)(9): Identify any current agreements between the jurisdiction and other units of local government or public authorities for the joint use of solid waste processing or disposal facilities and evaluate the need for and feasibility of entering joint agreements in the future.

10.1 CURRENT AGREEMENTS

There are currently no agreements between Marshall County and any other unit of local government or public authority for the joint use of solid waste processing or disposal facilities.

The cities of Albertville and Boaz operate the Albertville Boaz Recycling Center as a joint venture agreement between the two municipalities. Each municipality contributes monetarily to the recycling center and provides labor through community service workers and city jail inmates.

10.2 EVALUATION OF NEED FOR FUTURE JOINT USE AGREEMENTS

Marshall County does not currently anticipate the need for joint agreements with any other unit of local government or public authority. However, in the event of an emergency such as a natural disaster, or any other unforeseen need, the participating jurisdictions may enter into joint agreements with other units of local government or public authorities to accommodate solid waste processing and/or disposal needs throughout the life of this SWMP.

It is anticipated that the cities of Albertville and Boaz will continue their joint venture operation of the Albertville Boaz Recycling Center in the future.

PRIVATE COLLECTION, PROCESSSING AND/OR DISPOSAL CONTRACTS

Section 22-27-47(b)(10): Identify any current contractual agreements with private entities for the collection, processing or disposal of solid waste and evaluate the need for and feasibility of entering into such agreements in the future.

11.1 CONTRACTS WITH PRIVATE SOLID WASTE CONTRACTORS

Marshall County and several of its municipalities currently have separate contracts with Republic Services/Allied Waste to provide household solid waste collection services throughout various parts of the county. A couple of these agreements also include recycling services for the municipality.

The cities of Albertville and Guntersville have joined together to form the Albertville – Guntersville Metropolitan Solid Waste Authority. This Authority currently has a contract with Republic Services to obtain the lowest available tipping fees for the solid waste that is collected in these municipalities.

11.2 EVALUATION OF NEED FOR FUTURE AGREEMENTS WITH PRIVATE SOLID WASTE CONTRACTORS

Contractual agreements for solid waste collection services or tipping fees will vary throughout the life of this Plan. Since the City of Guntersville is currently the only municipality that provides its own solid waste collection services, it is anticipated that contractual agreements with private (or governmental) entities will continue to be needed in the future for collection services in other municipalities. These contracts are typically bid out on a minimum three (3) year basis. Contracting with a private company gives the County and its municipalities increased flexibility over the services received and at a lower cost.

SITING FOR SOLID WASTE PROCESSING OR DISPOSAL FACILITIES AND RECYCLING PROGRAMS

Section 22-27-47(b)(11): Identify the general location within a county where solid waste processing or disposal facilities and recycling programs may be located, and identify the site of each facility if a site has already been chosen. In identifying general locations for facilities in the plan, each jurisdiction shall consider at least the following:

- a. The jurisdiction's solid waste management needs as identified in its plan;
- b. The relationship of the proposed location or locations to planned or existing development, to major transportation arteries and to existing state primary and secondary roads.
- c. The relationship of the proposed location or locations to existing industries in the jurisdiction or state that generate large volumes of solid waste and to the areas projected by the state or local regional planning and development commission for development of industries that will generate solid waste;
- d. The costs and availability of public services, facilities and improvements which would be required to support a facility in this location and protect public health, safety and the environment;
- e. The potential impact a facility in the proposed location or locations would have on public health and safety, and the potential that such locations can be utilized in a manner so as to minimize the impact on public health and safety; and
- f. The social and economic impacts that a facility at the proposed location would have on the affected community, including changes in property values, community perception and other costs.

12.1 GENERAL

When siting solid waste processing, disposal or recycling facilities, a balance must be struck between the need for environmentally sound waste disposal capacity and recycling ability and the concerns of local citizens and municipalities. Siting factors to consider include: public health and safety, accessibility, drainage, soils, proximity to groundwater and surface water, potential for surface subsidence (underground mining or karst topography), hauling distance and adjacent land use.

12.1.1 Specific Requirements and Considerations

In the consideration of future facilities, the jurisdiction shall consider the following specific items. The jurisdiction shall determine if these items have been addressed in a logical and complete manner.

- 1. The consistency of the proposal with the jurisdiction's solid waste management need as identified in its SWMP. In considering future facilities, the SWMP should be reviewed to determine if the proposed facility fills a need as described in the Plan, or fills a need not existing at the time of the Plan's preparation. These considerations should be evaluated by the jurisdiction early in the process.
- 2. The relationship of the proposal to local planned or existing development, to major transportation arteries and to existing state primary and secondary roads. The proximity of a proposed solid waste project to existing or planned major transportation routes is crucial. All solid waste facilities are dependant upon good roads to facilitate access to and from.

Additionally, the type of facility dictates the required proximity. Transfer stations should be located near major arteries as the haul trucks operate best on highways. Recycling centers should be located for ease of access by the public, bearing in mind that material haul trucks need access as well. Landfills are best located in rural or industrial areas, hidden from view of the general public, yet not too far from major arteries and primary state roads so haul and collector trucks can have adequate access.

- 3. The location of a proposed facility in relationship to existing industries in the state that generate large volumes of solid waste, or the relationship to the areas projected for development of industries that will generate solid waste. Ideally, a facility intended to service an industry should be located as close as possible to the industry. This is sensible from a cost standpoint, but it also minimizes the impact on the community and public health and safety. Absent that, it should be located near major arteries or primary state roads in an appropriate area of the jurisdiction (see Item 2. above).
- 4. Costs and availability of public services, facilities and improvements required to support a proposed facility and protect public health, safety and the environment. A solid waste facility or recycling facility will require certain public services as a minimum. Water service is vital for fire protection, sanitation, and housekeeping. Water service can be public water system extensions or on-site wells. Sewage treatment facilities close at hand is convenient for leachate and wash down water treatment as well as sanitation treatment. If these are not close by, then liquid wastes will need to be captured and hauled to the facilities or sewer extensions constructed. Alternatively, on site treatment can be considered.
- 5. The potential impact of a proposed facility on public health and safety, and provisions made to minimize the impact on public health and safety. The proposed facility plan should address transportation safety by evaluating existing roads and traffic controls with proposed upgrades; wastewater, leachate and washdown water capture, transport and treatment must be addressed; stormwater and erosion control systems must be adequately designed and detailed to protect surface and groundwater resources; and adequate safeguards to prevent contamination of air and water resources, nuisance odors, and aesthetic eyesores must be considered. Finally, provisions to minimize or prevent the public from coming in contact with solid waste must be provided (access control).

6. The social and economic impacts of a proposed facility on the affected community, including changes in property values, and social or community perception. Social impacts of a proposed solid waste facility or recycling center can be difficult to quantify. The jurisdiction shall evaluate a proposed project's location, impact on public safety and public facilities, and shall also consider the opinions and concerns of community representatives and the general public. Economic impact positives such as jobs and revenue shall be weighed along with possible negative perceptions.

12.2 SITING FOR FUTURE SOLID WASTE PROCESSING OR DISPOSAL FACILITIES

The Marshall County Commission, or its municipalities, will determine if future landfills, processing facilities or recycling facilities will be sited in their jurisdiction, or if expansions or modifications to existing facilities which require Host Government consideration will be approved in their jurisdiction. If a new facility is determined to be needed during the planning period of this SWMP, the items described above shall be considered to determine the best location for that facility. Locations near major transportation routes such as Interstates and U.S. Highways, and near generators of large quantities of solid waste would be important to the selection of a possible area. The expansion of an existing facility would best occur on site if possible.

12.3 CURRENTLY PROPOSED SOLID WASTE PROCESSING/DISPOSAL OR RECYCLING FACILITIES

There are no known proposed solid waste processing, disposal or recycling facilities planned for Marshall County. However, due to collection, transportation and/or disposal costs, or other currently unforeseen issues, the option to site future solid waste processing facilities, disposal facilities, or recycling facilities in Marshall County shall remain available to the County and the municipalities within the County. In addition, the option to approve a future expansion or modification to an existing facility shall also remain available to the County and its municipalities.

UTILIZING SOLID WASTE FACILITIES OUTSIDE THE JURISDICTION

Section 22-27-47(b)(12): For any facility expected to serve the jurisdiction's future needs that is located or is proposed to be located outside the jurisdiction, the plan shall explain in detail the reasons for selecting such a facility.

13.1 FACILITY USE OUTSIDE OF JURISDICTION

Since there is no municipal solid waste landfill currently located in Marshall County, all municipal solid waste generated in Marshall County is currently being disposed of in the GEK - Sand Valley Landfill, which is located in DeKalb County. A small amount of C/D waste and a significant amount of industrial waste collected by Republic Services/Allied Waste is also being disposed of in the GEK – Sand Valley. The decision on which landfill or Transfer Station to take the solid waste to after it is picked up is typically determined by the collection agency and is usually based on ownership, tipping fees, and ease of transportation to the facility.

A small amount of tire waste is also currently being disposed of at the B & B Tire Landfill in Blount County. Since MSW landfill space is very valuable, many MSW landfills are not allowed to accept bulk amounts of whole tires for disposal in their landfill. When specialty contractors collect used tires from automotive and tire businesses, the waste is transported to a facility that will accept these tires. It is the contractor's choice as to which location he takes the tires to for proper disposal.

REFERENCES

- (1) Website, Alabama State Legislature: www.legislature.state.al.us/CodeofAlabama/1975/coatoc.htm, Section 22-27-47.
- (2) USEPA, August 1995. *Decision Makers' Guide to Solid Waste Management, Volume II*. EPA530-R-95-023, and ADEM Admin. Code r. 335-13-1-.03.
- (3) U.S. Census Bureau and Center for Business and Economic Research, The University of Alabama, Fall 2013.
- (4) USEPA, December 2011. Municipal Solid Waste in the United States: 2010 Facts and Figures. EPA-530-F-11-005.
- (5) Website, Alabama Department of Environmental Management (ADEM) Landfill Lists: MSW: www.adem.state.al.us/programs/land/landforms/MSWLFMasterList08-11.pdf
 C/D and ILF: www.adem.state.al.us/programs/land/landforms/CDILFMasterList08-11.pdf
- (6) ADEM Admin. Code r. 335-13-1-.03 Definitions. Revised April 3, 2013.

APPENDIX "A"

APPLICATION FOR HOST GOVERNMENT APPROVAL

HOST GOVERNMENT APPLICATION FOR PROPOSED SOLID WASTE FACILITY IN MARSHALL COUNTY

This application is to be filled out and submitted to the host government (County or participating municipality) for consideration of a proposed solid waste facility or the modification of permits for existing facilities (as described in Alabama Code § 22-27-48). Failure to provide all requested information may result in the application being rejected as incomplete. Time frames will begin only after the participating jurisdiction has determined that the application is complete.

- A. Unless waived by the proposed Host Government, an Application Review Fee equal to 20% of ADEM's permit fee for the proposed facility will be required to be submitted with the application. The fee shall be made payable to the proposed Host Government with a written request for host government approval to locate a solid waste facility, or make modifications to the permit of an existing facility (if the modifications require Host Government Approval), within the legal boundaries of the approving jurisdiction. If an application is received for the same facility within 18 months of it being denied or rejected by the local governing body, the Application Review Fee shall be equal to 50% of the ADEM's permit fee.
- B. Once an application is determined to be complete, a Public Hearing date will be set. The County Commission or participating jurisdiction will place a legal advertisement in a local newspaper to run at least one time identifying time and date of a Public Hearing. A Public Notice describing the date and time of the Public Hearing shall also be displayed in an area typically used for governmental public notifications (i.e. City Hall or Courthouse hallway).
- C. The advertisement is required to run in the newspaper not less than 30 days and not more than 45 days before the Public Hearing.
- D. At least two competent representatives of the proposed facility shall be present at the Public Hearing.
- E. The Approving Jurisdiction will consider the proposal and will determine whether to approve or disapprove the site based on all information provided including the considerations set forth in Alabama Code § 22-27-48.
- F. The Jurisdiction or County Commission will rule on the completed application within 90 days of its receipt.
- G. If any portion of the described review process is found to be in conflict with the requirements of Alabama Code § 22-27-48, or any updated statute, the regulatory requirements shall supercede the requirements of this Plan.

1. P	ROPOSED NAME OF FACILITY:
2. A	PPLICANT:
]	Name
	Address
-	Гelephone
]	f applicant is a Corporation, list Officers:
_	
<u>-</u>	
]	If applicant is a Partnership, list principals:
-	
]	Principal Stockholders:
_	
3. P	ROPOSED FACILITY TYPE:
	MSW LANDFILL
	C & D LANDFILL
	INDUSTRIAL LANDFILL
	PROCESSING FACILITY (Describe)
	OTHER (Explain)

3. CO	CONTACT PERSON(S): (if different from No. 2)	
Name	nme (1) (2)	
Addre	ldress	
Telep	elephone	
I		
4. LA	LANDOWNER: (if different from No. 2)	
Attacl purpo	tach a copy of the agreement from landowner giving permission rpose.	to use site for the intended
Name	nme	
	ldress	
Telep	lephone	
5. SIT	SITE DESCRIPTION:	
a.	a. Location: Township Range	
	Section ½ Section(s)	
b.	b. Attach location map with the site clearly identified. Acceptable or 15 minute series, a county highway map published by the equivalent.	
c.	c. Attach a legal property description and boundary plat of the pra a land surveyor.	roposed facility prepared by
d.	d. Size of disposal facility (actual area to be utilized)	acres.
e.	e. Total area of property (if different from d.)	acres.

6. ADJACENT LANDOWNERS:

- a. Submit a list of all adjacent landowners including name and current mailing address.
- b. Submit a map identifying the proposed disposal site and all adjacent landowners listed in (a) above. State the source of your information.

7. WASTE DESCRIPTION:

a.	Describe and list all waste streams to be accepted at the facility. Be specific (household solid waste, wood boiler ash, foundry sand, discarded tires, dried sludge, limbs and stumps, etc.)
b.	What is the estimated maximum daily volume of waste to be received at the facility?(indicate tons/day or yd³/day)
c.	What geographic area or specific industry will waste be accepted from? (be specific)
d.	Haulage of waste to the facility will be by whom?
e.	Describe the principle type of transportation vehicle to be used to transport waste:
f.	Approximately vehicles per day (max.) will be generated as additional traffic on the main collector road to this solid waste facility.
g.	Describe all proposed environmental monitoring systems (i.e. groundwater, explosive gas, leachate collection, liner systems).

8. SITING STANDARDS:

a.	Is the facility located within the 100-year flood plain?
	YESNO
	Provide a current flood insurance rate map with the site identified.
b.	Is the facility located so as to protect surface and groundwater?
	YESNO
	Explain on an attached sheet.
c.	Is a discharge to surface water proposed that may require an NPDES Permit?
	YESNO
	Explain on an attached sheet.
d.	Is a discharge of dredged material or fill material into waters of the state proposed which may require a permit under Section 404 of the Clean Water Act?
	YESNO
e.	The bottom elevation of solid waste shall be a minimum of five feet above the seasona high groundwater table or bedrock. The minimum depth to (CIRCLE ONE: Bedrock groundwater) at this site is feet. (Attach map showing location)
f.	Are any sink holes, ponds, springs, swamps, streams, or drainage courses located within the disposal area?
	YESNO
	If YES, explain
g.	Identify any airport runway located within 10,000 feet of the site?

h.	How many landfills (or similar type facility) are within a ten (10) mile radius of this proposed facility?
i.	Does the entrance to the facility meet current standards for sight distance? (Note: The County Engineer's office will review any proposed design that impacts County roads)
j.	Will any stormwater runoff be directed to a road right-of-way? If so, describe.
	NERAL: Describe how the property boundaries will be clearly and permanently marked.
b.	Describe and/or show your planned progression of fill from beginning operation through closure.
c.	The life expectancy of the facility is years.

9.

d.	How will indiscriminate dumping be prevented (gates, fencing, etc.)?
e.	Describe what equipment will be utilized in the disposal operation.
f.	Describe what personnel will be utilized in the disposal operation.

g. The applicant is responsible for compliance with all other requirements identified by applicable statutes and the ADEM Administrative Code.

10. Alabama Code § 22-27-48:

Describe how the proposed facility shall meet each of the criteria set forth in Alabama Code § 22-27-48.

- a. The consistency of the proposal with the jurisdiction's solid waste management need as identified in its plan;
- b. The relationship of the proposal to local planned or existing development or the absence thereof, to major transportation arteries and to existing state primary and secondary roads;
- c. The location of the proposed facility in relationship to existing industries in the state that generate large volumes of solid waste, or the relationship to the areas projected for development of industries that will generate solid waste;
- d. Cost and availability of public services, facilities and improvements required to support the proposed facility and protect public health, safety and the environment;

- e. The impact of proposed facility on public safety and provisions made to minimize the impact on public health and safety; and
- f. The social and economic impacts of the proposed facility on the affected community, including changes in property values, and social or community perception.

ION:							
	,	certify	under	penalty	of la	w that	this
all attachments submitted are	e to the	best o	of my	knowledge	e and	belief,	true,
mplete.							
Corporate Officer, Partner, Ma	ayor, Ch	airman,	etc.)				
Printed Name and Title)							
	mplete.	all attachments submitted are to the implete. Corporate Officer, Partner, Mayor, Ch					

APPENDIX "B"

PUBLIC NOTICE and COMMENTS

- B-1: MARSHALL COUNTY 2014 SWMP
 PUBLIC HEARING GENERAL
- **B-2: NOTICE OF PUBLIC HEARING**
- **B-3: PUBLIC HEARING SIGN-IN SHEET**

B-1: MARSHALL COUNTY SWMP PUBLIC HEARING - GENERAL

A public hearing regarding the *Marshall County Solid Waste Management Plan, 2014* (SWMP or Plan) was held on Wednesday, July 9, 2014 to hear public comment on the Draft version of the County's Plan. This public hearing was held in the Marshall County Commission Chambers in the Marshall County Courthouse. A notice announcing the public hearing was published in a local paper (The Advertiser–Gleam) at least thirty (30) days prior to the hearing and a copy of the SWMP was made available to the public by the Marshall County Commission from June 4, 2014 to July 8, 2014.

There were no public comments received during the public comment period or the public hearing.

Note: On July 23, 2014, a question was submitted to the Marshall County Commission and County Engineer by Mr. Grover L. Williams of Guntersville, AL. This question was submitted well after the close of the public comment period (ended July 9, 2014). Mr. Williams asked "What comments has the Marshall County Solid Waste Board had with regard to the proposed plans language changes? In particular any changes regarding recycling efforts by residents and/or County trash collectors." Although no response was required to this comment since it was received after the close of the public comment period, the Marshall County Engineer did respond to Mr. Williams on July 24, 2014 by saying they "have not received any comments."

B-2: NOTICE OF PUBLIC HEARING

Affidavit of Publication of Legal Notice

PUBLIC NOTICE/Comment Period Notice Marshall County Solid Waste Management Plan State of Alabama Marshall County

Before me, a notary public in and for the county and state above listed, personally appeared Patricia Sutton, who, by me duly sworn, deposes and says that: "My name is Patricia Sutton and I am the Representative of The Advertiser-Gleam. The Newspaper is printed in the English language, has a general circulation and its principal editorial office in the county above listed and has been mailed under a publication class mailing privilege of the United States Postal Service from the post office where it is published at least 51 weeks a year.

The Newspaper published the attached legal notice in the issues of: June 4 2014

The sum charged for these publications was \$78.50 The sum charged by the Newspaper for said publication does not exceed the lowest is the actual lowest classified rate paid by commercial customers for an advertisement of similar size and frequency in the same newspaper(s) in which the public notice appeared.

There are no agreements between the Newspaper and the officer or attorney charged with the duty of placing the attached legal advertising notices whereby any advantage, gain or profit accrued to said officer or attorney.

Sworn and subscribed this 4th day of June 2014

Notary Public

My Commission expires 3/13/16

PUBLIC HEARING/ COMMENT PERIOD NOTICE Marshall County Solid Wast Management Plan

As required by the Alabam Solid Wastes & Recyclable Mi terials Management Act (SWF MMA), Code of Alabama 197: 822-27-47, the Marshall Count Commission will conduct a public hearing to solicit public comment concerning the County. Solid Waste Management Plar (SWMP or Plan). The Public Hearing will be held Wednesday, July 9, 2014 at 10:00 AM at the Marshall County Commission Chambers, 424 Blount Avenue, Suite A-319, Guntersville AL. Commission will conduct a pub

Each city and county of the State of Alabama is required to develop and adopt comprehen sive Solid Waste Managemen Plans which forecast and describe the management of solid waste openanted within the less waste openanted w Plans which forecast and describe the management of solid waste generated within the loca government's jurisdiction over a minimum 10-year period. The SWMP includes topics such as describing the types and volumes of solid waste generated in the county, the methods of collection, transportation and disposal for this solid waste, descriptions of major recycling programs in the county, and other solid waste management issues. Copies of the draft Marshall County Solid Waste Management Plan will be available for review, 8:00 AM to 4:30 PM, Mondays through Fridays (excluding holidays), between the dates of June 4, 2014 and July 8, 2014 at the Marshall County Commission Office, 424 Blount, Avenue, Guntersville, AL. To obtain copies of the document or to obtain additional information. obtain copies of the document of to obtain additional information. contact Mr. Robert X. Pirando, PE, Marshall County Engineer, 424 Blount Avenue, Suite A337, Content of the County Engineer, 424 Blount Avenue, Suite A337, Content of the County Engineer, 424 Blount Avenue, Suite A337, Content of the County Engineer, 425 Content of the County Engineer, 425 County Engineer, 426 County Engineer, 426 County Engineer, 427 County En Guntersville, AL, phone: (256) 571-7712.

If any local citizen wishes to submit public comments, such comments shall be submitted in writing no later than 9:00 AM on July 9, 2014 to: Mr. Robert X. Pirando. PE. 424 Blount Avenue, Suite A337, Guntersville, AL, 35976. Public comments may also be submitted, in writing, at the Public Hearing (date and address given above). In order to affect final decisions or content of the SWMP comments must offer technically substantial information that is

ments must offer technically substantial information that is applicable to the proposed Plan. This notice is hereby given this 4th day of June 2014, by au-thorization of the Marshall County Commission. Solid Waste 2W-6/11

B-3: PUBLIC HEARING SIGN-IN SHEET

Public Hearing

Marshall County Solid Waste Management Plan Wednesday, July 9, 2014 10:00 a.m.

Public Hearing Attendance Sign-In Sheet

(Please write your name legibly)

No.	Name	No.	<u>Name</u>
1	Cellste Lachenniger	13	andrea Le Conx
2	Jamey L. Hale	14	Jerie CSword
3	Karen young	15	andy Mc Gregor
4	James Hutcheson	16	Rathal Williams
5	Abely Flush	17	Toffey Milela
6	REMartin	18	BobPirando
7	Jan helles	19	
8	4015	20	
9	Sibu Tu	21	
10	Shirt Mize	22	
11	Mule At	23	
12	Jan amphour	24	

APPENDIX "C"

C-1: PUBLIC HEARING MINUTES

C-2: RESOLUTION ADOPTING THE 2014 SOLID WASTE MANAGEMENT PLAN

C-1: PUBLIC HEARING MINUTES

July 9, 2014

The Marshall County Commission met in regular session on Wednesday, July 9, 2014 at 10:00 am in the Marshall County Commission Chambers.

PRESENT WERE:

James Hutcheson, Chairman
William H. Stricklend, III, Dist. 1 Commissioner
R.E. Martin, Dist. 2 Commissioner
David Kelley, Dist. 3 Commissioner
Tamey Hale, Dist. 4 Commissioner
Shelly Fleisher, County Administrator
Jennifer Lewis, Commission Clerk
Bob Pirando, County Engineer
Karen Young, Administrative Assistant
Clint Maze, County Attorney

Chairman Hutcheson called the meeting to order and asked Chuck Knight, Pastor First Baptist Church of Douglas to deliver the invocation. He then asked Commissioner Tamey Hale to lead the Pledge of Allegiance.

Jean Ann Moon, Director of RSVP presented the Marshall County Retired and Senior Volunteer Program 2013 annual report.

CONSENT AGENDA

A motion was made by Commissioner Martin, duly seconded by Commissioner Kelley, all members voting affirmatively and so carried to approve the consent agenda as read by Chairman Hutcheson. The consent agenda includes the minutes from the June 25, 2014 commission meeting and the claims docket for June 24, 2014 – July 7, 2014 in the amount of \$576.485.24.

APPROVE REQUEST FOR ADDITIONAL FUNDING FOR CORONER'S BUDGET FROM CONTINGENCY FUND

A motion was made by Commissioner Hale, duly seconded by Commissioner Kelley, all members voting affirmatively and so carried to approve additional funding for Coroner's budget for transportation of bodies. This \$1,000 will come from contingency fund.

LIBRARY - APPROVE CONTRACT BETWEEN MARSHALL COUNTY COOPERATIVE LIBRARY AND CITY OF ARAB AND APPROVE ANNUAL RENEWAL OF MARSHALL COUNTY COOPERATIVE LIBRARY CONTRACT

A motion was made by Commissioner Stricklend, duly seconded by Commissioner Hale, all members voting affirmatively and so carried to approve the amendment to the annual library contract to add Arab City to the list of participating libraries and approve the annual library contract between the Marshall County Commission and the library boards of Albertville, Arab, Boaz and Guntersville cities.

ANNOUNCE TWO (2) WEEK APPLICATION PERIOD OF BOARD APPOINTMENT FOR MARSHALL COUNTY DEPARTMENT OF HUMAN RESOURCES

Chairman Hutcheson announced the two (2) week application period for the board appointment for Marshall County Department of Human Resources. The application period will end and a member will be appointed at the commission meeting July 23, 2014.

PROBATE - APPROVE FUNDING REQUEST FOR 25 COMPUTERS AT APPROXIMATELY \$15,000 TO COME FROM GENERAL FUND FUND BALANCE

A motion was made by Commissioner Hale, duly seconded by Commissioner Kelley, all members voting affirmatively and so carried to approve funding request for 25 computers at approximately \$15,000 to come from general fund fund balance. This purchase is due to XP issue.

July 9, 2014

APPROVE RESOLUTION TO ADOPT THE PROVISIONS OF ACT 2014-429 TO PROVIDE A ONE-TIME LUMP SUM PAYMENT TO RETIREES TO BE BUDGETED IN FISCAL YEAR 2016

A motion was made by Commissioner Stricklend, duly seconded by Commissioner Hale, all members voting affirmatively and so carried to approve the resolution, as read by Chairman Hutcheson, adopting the provisions of Act 2014-429. This resolution provides a one-time lump sum payment to retirees in fiscal year 2015 and will be budgeted in the 2016 fiscal year.

Chairman Hutcheson announced opening of public hearing for Solid Waste Plan. Celeste T. Lachenmyer, PE with Engineer Services Associates provided update on the current Solid Waste Management Plan for Marshall County. This plan is required to be approved every 10 years. There were no public comments or questions.

ADJOURNMENT

There being no further business; a motion was made by Commissioner Martin, duly seconded by Commissioner Kelley and so carried to adjourn.

MEETING ADJOURNED

James Hutcheson, Chairman

William H. Stricklend, District 1 Commissioner

Wille

R.E. Martin, District 2 Commissioner

David Kelley, District 3 Commissioner

Tamey Hale, District 4 Commissioner

C-2: RESOLUTION ADOPTING THE 2014 SOLID WASTE MANAGEMENT PLAN

MARSHALL COUNTY COMMISSION

RESOLUTION TO ADOPT THE MARSHALL COUNTY SOLID WASTE MANAGEMENT PLAN

WHEREAS, the Marshall County Commission ("Commission") is required by the Alabama Solid Wastes & Recyclable Materials Management Act (SWRMMA), <u>Code of Alabama</u> 1975, §22-27-47, to periodically submit a minimum ten-year Solid Waste Management Plan (SWMP) to address solid waste management within the County; and

WHEREAS, the Marshall County Commission has retained the engineering firm of Engineering Service Associates, Inc. to prepare the required SWMP, and has conducted a public hearing preceded by the required public comment period to solicit input, and has consolidated citizen comments and concerns, if any, into the development of the completed plan; and

WHEREAS, the Solid Waste Management Plan must be adopted through a resolution by the County Commission before submission to the Alabama Department of Environmental Management.

NOW, THEREFORE, BE IT RESOLVED that the Marshall County Commission approves and adopts the Marshall County Solid Waste Management Plan - 2014, and that this Solid Waste Management Plan will serve as the basis for solid waste management within Marshall County from the date of adoption through December 31, 2024, unless amended prior to that date.

Passed and adopted this 2 day of 2014.

MARSHALL COUNTY COMMISSION

Chairman

APPENDIX "D"

ADEM APPROVAL LETTER

LANCE R. LEFLEUR DIRECTOR



ROBERT J. BENTLEY
GOVERNOR

Alabama Department of Environmental Management adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463 Montgomery, Alabama 36130-1463 (334) 271-7700 ■ FAX (334) 271-7950

August 26, 2014

The Honorable James Hutcheson, Chairman Marshall County Commission 424 Blount Avenue Guntersville, AL 35976

Re:

Final Approval

Marshall County SWMP

Dear Mr. Hutcheson:

The Alabama Department of Environmental Management (ADEM) has completed the review of the documents related to the referenced Solid Waste Management Plan received by the Department on August 15, 2014. Based on our review of this Plan, we have determined that the Plan meets the minimum requirements found in Code of Alabama 1975, §22-27-47 and 22-27-48, and was satisfactorily considered by the Marshall County Commission pursuant to the public notice requirements found in the statute. The Department hereby approves the Marshall County Solid Waste Management Plan, as submitted, without further conditions.

If you should have any questions, please contact Mr. Jonathan Crosby of the Solid Waste Engineering Section at (334) 270-5644.

Sincerely,

S. Scott Story, Chief

Solid Waste Engineering Section

Land Division

SSS/jc

110 Vulcan Road Birmingham, AL 35209-4702 (205) 942-6168 (205) 941-1603 (FAX) 2715 Sandlin Road, S. W. Decatur, AL 35603-1333 (256) 353-1713 (256) 340-9359 (FAX)



2204 Perimeter Road Mobile, AL 36615-1131 (251) 450-3400 (251) 479-2593 (FAX)

Mobile-Coastai

4171 Commanders Drive Mobile, AL 36615-1421 (251) 432-6533 (251) 432-6598 (FAX)