

JEFFERSON COUNTY, ALABAMA



SOLID WASTE MANAGEMENT PLAN

2015

DRAFT

Prepared for:

Jefferson 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.

Jefferson County has retained Engineering Service Associates, Inc. (ESA) to update their SWMP. The *Jefferson 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 Jefferson County for the period of 2015 to 2025. This Plan addresses aspects of solid waste management including generation, collection, transportation, disposal, recycling, and illegal dumps, and is intended to have general applicability for circumstances that may affect solid waste management in Jefferson County. In particular, the SWMP addresses 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. *Please note that the solid waste generation tonnages provided in this SWMP typically refers to the weight of materials as they enter the waste management system after recycling has taken place. To obtain a true solid waste generation rate, the recycling tonnages should be added to the current generation totals.*
- 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, 2015 – December 31, 2025. **For reporting purposes, this SWMP shall expire January 1, 2026.**

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 the calendar year 2013 and all references to “current” conditions reflect those conditions present during the development of this SWMP. Preparation of the *Jefferson 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 JEFFERSON COUNTY “COVERED” MUNICIPALITIES

Jefferson County currently contains thirty-eight (38) municipalities, with thirty-two (32) of these participating in the County’s Solid Waste Management Plan (SWMP). Although small portions (by population) of the Cities of Hoover, Leeds, Trussville and Vestavia Hills are located in other counties, the majority population of these areas is in Jefferson County; therefore, the entire municipality will be covered by the Jefferson County SWMP.

Likewise, small portions of the Towns of Argo and County Line, and the Cities of Helena and Sumiton are located in Jefferson County. The majority population of these areas is in other counties and therefore not included in this SWMP. It is anticipated that these municipalities will

be covered by the St. Clair County, Blount County, Shelby County, and Walker County SWMPs, respectively.

There are two (2) municipalities within Jefferson County who are “opting out” of the County’s SWMP. These municipalities are: Birmingham and Sylvan Springs. It is anticipated that each of these municipalities will prepare and submit their own Solid Waste Management Plan to ADEM.

The remaining municipalities participating in the *Jefferson County Solid Waste Management Plan - 2015* are:

Adamsville	Homewood	Mulga
Bessemer	Hoover	North Johns
Brighton	Hueytown	Pinson
Brookside	Irondale	Pleasant Grove
Cardiff	Kimberly	Tarrant
Center Point	Leeds	Trafford
Clay	Lipscomb	Trussville
Fairfield	Maytown	Vestavia Hills
Fultondale	Midfield	Warrior
Gardendale	Morris	West Jefferson
Graysville	Mountain Brook	

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. As mentioned above, two municipalities have elected to opt out of the Jefferson County SWMP and will be responsible for submitting their own SWMP.

The municipal governments of Jefferson 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 Jefferson 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 Jefferson County Commission.

1.7 PUBLIC HEARING

As required by Alabama Law, a public hearing was held to solicit comments on the *Jefferson 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**. **___ comments were received during the public comment period or the public hearing. Responses to the comments, if any are required, are also included in the Appendix.**

1.8 COUNTY COMMISSION RESOLUTION

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

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. Commercial waste generally consists of mixed paper, cardboard, office supplies and kitchen wastes from restaurants and hotels.

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

Non-hazardous and non-putrescible materials typically resulting from the construction, remodeling, repair, cleaning, or demolition of buildings, bridges, pavements, and other structures. Such wastes include concrete and masonry materials, sheet rock, roofing waste, insulation (not including asbestos), scrap metal, and wood products.

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 more 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 handled 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 or county 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 – Practical Management for Every Home*" (Brochure is available online 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. Industrial waste does not typically enter the local municipal solid waste stream.

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 solid 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. This waste is often called garbage and is normally composed of kitchen waste, paper, plastics, glass, yard waste and other non-hazardous household waste.

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 Alabama Department of Environmental Management (ADEM) 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 GENERAL

To determine solid waste generation rates, information was collected on the types and tonnages of wastes being collected, the jurisdictions these wastes are being collected in, and the population of those areas being served. However, many municipalities and counties currently engage private companies for the collection, transportation and disposal of municipal solid waste that is generated in their jurisdiction. Unless specified otherwise in their contract, these companies typically create routes for the collection of solid waste in a large geographical area, regardless of municipal boundaries. In a metropolitan area such as Jefferson County, the solid waste from several municipalities may be commingled during collection before being taken to a landfill for disposal. In these cases, unless the collection company has a method to separate out tonnages by municipality, it is impossible to readily determine what portion of those tonnages were generated in a specific municipality.

In addition, household waste may be commingled with commercial waste during collection; therefore, specific records for residential or commercial solid waste tonnages are not available. In these cases, factors can be used to estimate and assign solid waste tonnages for each classification. For example, according to EPA's document "Municipal Solid Waste in the United States: 2010 Facts and Figures", when residential and commercial wastes are commingled, it is estimated that residential waste constitutes 55 to 65 percent of total MSW generation, with commercial waste constituting 35 to 45 percent of the total ⁽⁴⁾.

For Jefferson County however, the issue of assigning a particular ratio to the solid waste tonnages is further complicated by the fact that the City of Birmingham has opted out of the Jefferson County SWMP. The City of Birmingham's Department of Public Works currently collects residential solid waste from the majority of its residents; however, they do not pick up

residential waste from the large apartment complexes in the city limits or from the Birmingham Housing Authority's complexes. Instead, this waste (estimated by the Public Works Department to represent approximately 8,500 residents) is picked up by a private company and taken to an MSW landfill that is located outside the city limits of Birmingham. For commercial businesses in Birmingham, the Public Works Department only collects solid waste from those businesses that can utilize a small, wheeled garbage cart. This is estimated to represent only about 2% of the population in Birmingham. The other 98% of commercial waste is collected by private companies who also take this waste to an MSW landfill located outside the city limits of Birmingham.

Since the residential and commercial waste described above was generated inside Jefferson County but is not being tracked under the City of Birmingham's SWMP, it is being included in the tonnages for the Jefferson County SWMP. To cover the additional population that these tonnages represent, 8,500 residents are being added to the "covered area" population for residential waste generation and 206,700 residents (98% of Birmingham's 2013 population) are being added to the "covered area" population for commercial waste generation. Since the commercial waste tonnages will represent a much larger population in Jefferson County than residential tonnages, a 40/60 ratio of residential/commercial was applied to commingled wastes instead of the approximate 60/40 ratio recommended by EPA's "Municipal Solid Waste in the United States: 2010 Facts and Figures" document mentioned earlier.

2.2 MUNICIPAL SOLID WASTE GENERATION

2.2.1 Household Waste Generation

Household waste (garbage) is currently being collected from residences in Jefferson County by municipalities, private companies or homeowners. According to survey results, approximately **215,856 tons of household waste** was reported as being generated in the "covered" areas of Jefferson County in 2013. As described above, the City of Birmingham does not collect household waste generated in large apartment complexes or in the Birmingham Housing Authority's districts. The residential waste from these areas is picked up by a private collection agency and disposed of outside the city limits. Therefore, the population representing this sector

(estimated at 8,500 residents) is included in the “covered” population for Jefferson County’s residential solid waste calculations.

Table 2-1 presents a summary of the covered municipalities, estimated population served, collection agency, total amount of household waste collected, and the calculated per capita generation rate using the total “covered” population for the County.

2.2.2 Commercial Waste Generation

Commercial solid waste in the county is typically collected from area businesses by private collection agencies or the municipality. In 2013, approximately **323,783 tons of commercial waste** was reported as being generated in the “covered areas” of Jefferson County.

As also described above, the City of Birmingham only collects commercial solid waste from small businesses that can utilize a wheeled garbage cart (no dumpsters or roll-off containers). Instead, the commercial waste from larger businesses in Birmingham is picked up by a private collection agency and disposed of outside the city limits at a non-Birmingham MSW landfill. Therefore, the population representing this sector (estimated at 98% of the 2013 population, or 206,700 residents) is included in the “covered” population for Jefferson County’s commercial solid waste calculations.

Table 2-2 presents a summary of the covered municipalities, estimated population served, amount of commercial waste collected, and the calculated per capita generation rate, which is calculated using the total “covered” population for Jefferson County. Please note that several different collection agencies offer commercial solid waste collection services in Jefferson County. In some cases, multiple companies provide collection services in the same municipality. Therefore, the Collection Agency is not listed for each municipality in Table 2-2.

TABLE 2-1
2013 HOUSEHOLD WASTE GENERATION

Service Area	2013 Population	Solid Waste Collection Agency	Waste Generation Rate		
			TPY	TPD	PCD
Adamsville	4,528	City of Adamsville	215,855.60	591.39	2.47
Bessemer	27,495	City of Bessemer			
Birmingham – Apartments and Housing Authority	8,500	Republic Services			
Brighton	2,949	Republic Services			
Brookside	1,365	Republic Services			
Cardiff	55	County Franchise Hauler			
Center Point	16,955	Advanced Disposal Services			
Clay	9,722	Republic Services			
Fairfield	11,133	Republic Services			
Fultondale	8,392	Advanced Disposal Services			
Gardendale	13,913	Republic Services			
Graysville	2,168	City of Graysville			
Homewood	25,203	City of Homewood			
Hoover	81,736	Republic Services			
Hueytown	16,128	Republic Services			
Irondale	12,367	City of Irondale			
Kimberly	2,715	Waste Pro			
Leeds	11,789	Advanced Disposal Services			
Lipscomb	2,213	Republic Services			
Maytown	386	County Franchise Hauler			
Midfield	5,373	Republic Services			
Morris	1,862	Waste Mgmt/Waste Away			
Mountain Brook	20,442	Waste Management			
Mulga	837	County Franchise Hauler			
North Johns	145	County Franchise Hauler			
Pinson	7,173	Advanced Disposal Services			
Pleasant Grove	10,125	Waste Management			
Tarrant	6,406	Republic Services			
Trafford	647	Republic Services			
Trussville	19,958	Advanced Disposal Services			
Vestavia Hills	34,082	Republic Services			
Warrior	3,181	Republic Services			
West Jefferson	338	Republic Services			
Unincorporated Jefferson County - Franchise Districts	108,337	Advanced Disposal Services, Angela’s Garbage Services, or Mann Sanitation			
“Covered Area” of Jefferson County SWMP:	478,618		215,856 TPY	591 TPD	2.47 PCD

Source: The information in this Table was provided by the service area or the disposal sites.
TPY = Tons Per Year, TPD = Tons Per Day, PCD = Pounds Per Capita Per Day

TABLE 2-2
2013 COMMERCIAL WASTE GENERATION

Service Area	2013 Population	Waste Generation Rate		
		TPY	TPD	PCD
Adamsville	4,528	323,783.41	887.08	2.62
Bessemer	27,495			
Birmingham - Commercial	206,700 (98%)			
Brighton	2,949			
Brookside	1,365			
Cardiff	55			
Center Point	16,955			
Clay	9,722			
Fairfield	11,133			
Fultondale	8,392			
Gardendale	13,913			
Graysville	2,168			
Homewood	25,203			
Hoover	81,736			
Hueytown	16,128			
Irondale	12,367			
Kimberly	2,715			
Leeds	11,789			
Lipscomb	2,213			
Maytown	386			
Midfield	5,373			
Morris	1,862			
Mountain Brook	20,442			
Mulga	837			
North Johns	145			
Pinson	7,173			
Pleasant Grove	10,125			
Tarrant	6,406			
Trafford	647			
Trussville	19,958			
Vestavia Hills	34,082			
Warrior	3,181			
West Jefferson	338			
Unincorporated Jefferson County - Franchise Districts	108,337			
“Covered Area” of Jefferson County SWMP:	676,818	323,783 TPY	887 TPD	2.62 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

2.2.3 Municipal Solid Waste Generation

By combining the household waste generation rate and commercial waste generation rate, the municipal solid waste (MSW) generation rate can be calculated. In 2013, approximately **539,639 tons of MSW** was reported as being generated in the “covered portions” of Jefferson County. This equates to an average municipal solid waste generation rate of 5.09 lbs/capita/day. This generation rate represents the amount of solid waste estimated to be disposed of in a landfill and does not include the amount that was generated, but then recycled.

2.3 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.

In 2013, approximately **142,595 tons** of construction/demolition (C/D) waste was reported as being generated in the “covered” areas of Jefferson County. This tonnage represents the amount of solid waste actually disposed of in a landfill and does not include the amount that was generated, but then recycled. Although survey requests were made specifically for the “covered” areas of Jefferson County only, it is possible that a portion of the reported C/D waste was generated inside the city limits of Birmingham. Since it could not be confirmed if any of this C/D waste was specifically generated in Birmingham, the “covered” population estimates used in the generation rate calculation does not include any City of Birmingham population.

Table 2-3 presents a summary of each landfill that reported disposing of C/D waste generated in Jefferson County in 2013, the estimated population served, the amount of C/D waste collected, and the calculated per capita generation rate which is calculated using the total “covered” population for Jefferson County.

When C/D solid waste quantities were provided in cubic yards, these figures were converted to tons using 500 lbs per cubic yard (uncompacted).

TABLE 2-3
2013 CONSTRUCTION/DEMOLITION WASTE GENERATION

Landfill Disposing of C/D Waste Generated in Jefferson County in 2013	Permit No.	Location of Landfill	2013 Waste Generation Rate		
			TPY	TPD	PCD
B&B Tire Landfill	05-07	Blount County	950	2.60	1.66
WCA/Blount Landfill	05-08	Blount County	26,297	72.05	
Bessemer – Concord Landfill	37-29	Bessemer	0.0	0.0	
Think Pink, Inc. Coalburg Rd. Landfill	37-34	Coalburg	42	0.12	
Tarrant Landfill	37-35	Tarrant	3,119	8.55	
Raimund-Muscoda Inert Landfill	37-42	Bessemer	14,497.88	39.72	
Jefferson County LF #1 – C/D Area	37-43	Gardendale	22,884.40	62.70	
Fultondale Waste Complex	37-45	Fultondale	49,683.14	136.12	
Green Mountain Management Solid Waste Facility – C/D Area	37-48	Adamsville	24,981	68.44	
Highway 70 Landfill*	59-15	Shelby County	140.73	0.39	
“Covered Area” of Jefferson County SWMP:		470,118	142,595 TPY	391 TPD	1.66 PCD

* The Highway 70 Landfill in Shelby County only accepted C/D waste from that portion of the City of Hoover that is located in Shelby County. Source: The information in this Table was provided by ADEM, the solid waste collection agency or the disposal site. TPY = Tons Per Year, TPD = Tons Per Day, PCD = Pounds Per Capita Per Day

2.4 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 **89,219 tons** of industrial waste was reported as being generated in the “covered” areas of Jefferson County. This tonnage represents the amount of industrial waste actually disposed of in a landfill and does not include the amount that was generated, but then recycled.

Although survey requests were made specifically for the “covered areas” of Jefferson County only, it is possible that a portion of this Industrial waste was generated inside the city limits of Birmingham. Since it could not be confirmed if any of this industrial waste was specifically generated in Birmingham, the “covered” population estimates used in the generation rate calculation does not include any City of Birmingham population.

In addition, the Sylvan Springs Waste Complex is located in the Town of Sylvan Springs, who also opted out of the Jefferson County SWMP. Approximately half of the waste disposed of in this landfill in 2013 was reported as being generated in the “covered” areas of Jefferson County and is therefore included in the calculations below. Since none of this waste was reported as being generated in Sylvan Springs, the “covered” population estimates used in the generation rate calculation does not include any Sylvan Springs population.

Table 2-4 presents a summary of each landfill that reported disposing of industrial waste generated in Jefferson County in 2013, the estimated population served, the amount of industrial waste collected, and the calculated per capita generation rate which is calculated using the total “covered” population for Jefferson County.

TABLE 2-4
2013 INDUSTRIAL WASTE GENERATION

Landfill Disposing of Industrial Waste Generated in Jefferson County in 2013	Permit No.	Location of Landfill	2013 Waste Generation Rate		
			TPY	TPD	PCD
Miller Steam Plant Landfill (Alabama Power Company)	37-16	Western Jefferson County	16	0.04	1.04
US Pipe & Foundry Co. Mine #3 (US Pipe & Foundry Co.)	37-33	Southwest Jefferson County	18,828.75	51.59.	
ACIPCO Landfill No. 1 (ACIPCO)	37-39	Central Jefferson County	50.0	0.14	
ACIPCO Landfill No. 2 (ACIPCO)	37-41	Central Jefferson County	30,000	82.19	
Sylvan Springs Waste Complex (Amwaste/Matter Management)	37-46	Sylvan Springs	38,400	105.21	
WCA of Alabama LLC Industrial LF (aka WCA Fines LF)	59-15	Talladega County	1,924	5.27	
“Covered Area” of Jefferson County SWMP:		470,118	89,219 TPY	244 TPD	1.04 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

2.5 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. Four landfills reported disposing of special waste that was generated in Jefferson County in 2013: Jefferson County Landfill No. 1 (Mt. Olive Landfill), Green Mountain Solid Waste Facility, Star Ridge Landfill and the BFI Pineview Landfill.

In 2013, approximately **115,428 tons** of special waste was reported as being generated in Jefferson County. It is likely that a portion of this special waste was generated inside the city limits of Birmingham, who opted out of the Jefferson County SWMP. Therefore, the City of

Birmingham’s 2013 population (210,918) is included in the “covered area” population for the special waste calculations.

Table 2-5 presents a summary of each landfill that reported disposing of special waste generated in Jefferson County in 2013, the estimated population served, the amount of special waste collected, and the calculated per capita generation rate which is calculated using the total 2013 population for Jefferson County.

**TABLE 2-5
2013 SPECIAL WASTE GENERATION**

Landfill Disposing of Special Waste Generated in Jefferson County in 2013	Permit No.	Location of Landfill	2013 Waste Generation Rate		
			TPY	TPD	PCD
Jefferson County LF #1	37-43	Gardendale	9,117.72	24.98	0.93
Green Mountain Management Solid Waste Facility	37-48	Adamsville	88,000	241.10	
Star Ridge Landfill	58-05	St. Clair County	2,878	7.88	
BFI Pineview Sanitary Landfill	64-11	Walker County	15,432	42.28	
Covered Area of Jefferson County Population: (includes City of Birmingham)		681,036	115,428 TPY	316 TPD	0.93 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

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

Several municipalities in Jefferson County require at least mandatory residential participation in a solid waste collection program. The solid waste generated in Jefferson County is typically collected by private haulers/collection companies, individual municipalities, industries or homeowners and then transported to a Transfer Station or to one of several area landfills (see Chapter 4 for a description of the landfills and transfer stations currently being used).

3.2 MUNICIPAL SOLID WASTE (HOUSEHOLD AND COMMERCIAL)

In specific portions of Jefferson County, several private haulers operate as “Franchise” companies under the County’s Solid Waste Program. These franchise haulers provide solid waste collection and transportation services to residential customers under contracts which provide exclusive rights to collect waste in a defined geographic service area, typically in unincorporated Jefferson County and a few small municipalities (see Figure 3-1). Any solid waste collected under the Franchise program is required to be taken to a County facility for processing or disposal. The franchise haulers currently operating in Jefferson County are:

- Advanced Disposal Services (Districts 2-7, 9, 11, 13, 14, 16, 21, 24-26, 29, 32 and 34)
- Angela’s Roll-off and Garbage Service (Districts 30 and 33)
- Mann Sanitation (District 1)

Jefferson County is currently in the process of preparing bid documents to re-bid the County’s solid waste collection Franchise services. When these services are bid again, it is anticipated that a single collection agency will provide services in all of unincorporated Jefferson County. Some of the smaller municipalities have the option to provide solid waste collection services under this contract.

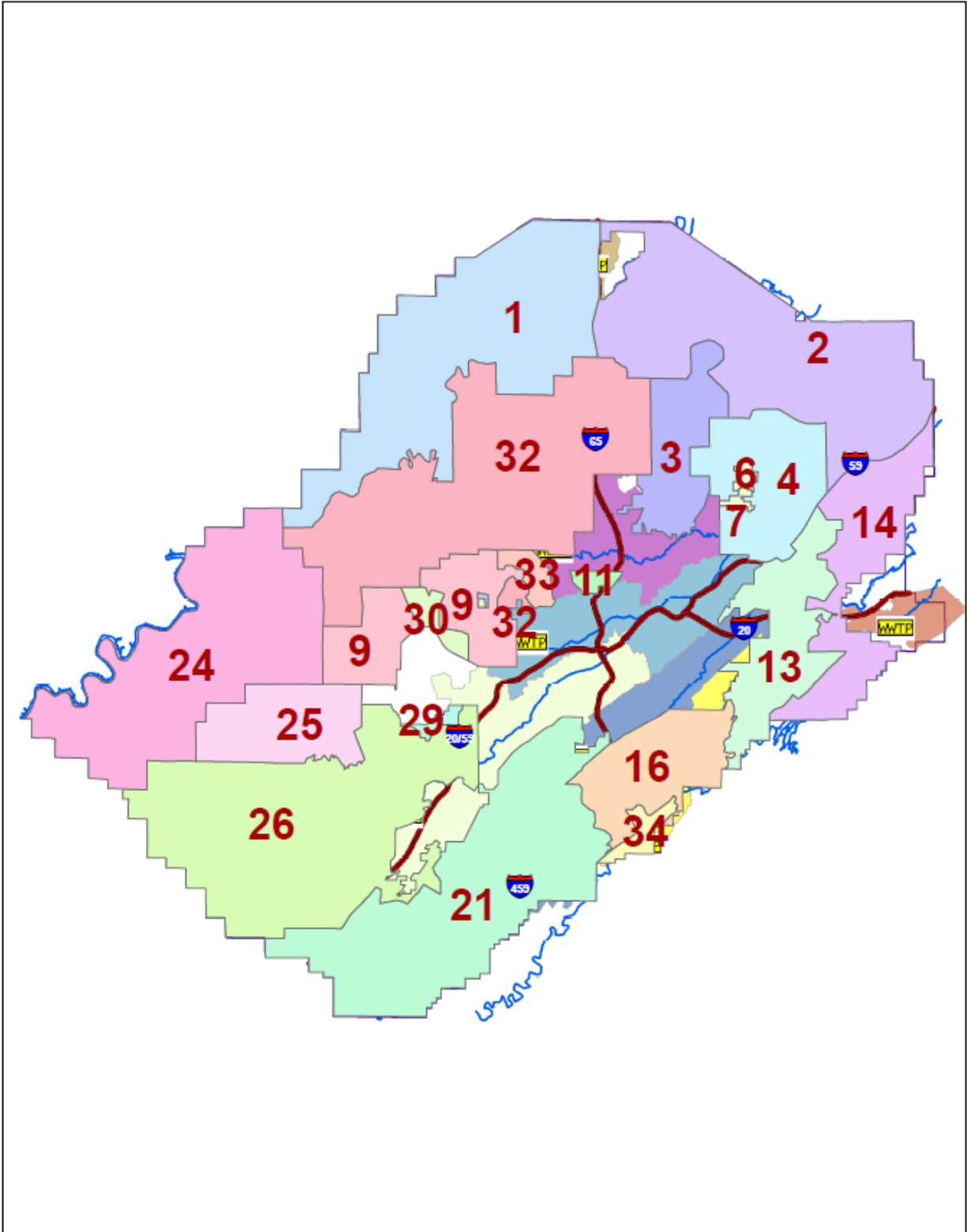


FIGURE 3-1
JEFFERSON COUNTY SOLID WASTE COLLECTION
FRANCHISE DISTRICTS

Several private solid waste collection agencies/haulers also currently operate in Jefferson County and its municipalities:

- Advanced Disposal Services
- Blount Waste Services
- James Moore Trucking
- Moore Coal Company
- Republic Services (a.k.a. BFI Waste Services, Allied Waste)
- Waste Management/Waste Away Group
- Waste Pro
- Waste Services of Alabama, LLC (Santek)
- WCA Waste Corporation

3.2.1 Service Areas

Following is a listing of each participating municipality in Jefferson County and its method of municipal solid waste collection and haulage (as of reporting year 2013).

Adamsville

The City of Adamsville's Public Works Department provides weekly residential solid waste collection services. This solid waste is taken to the Green Mountain Management Solid Waste Facility in Adamsville for disposal. Commercial businesses are allowed to utilize any collection agency they choose.

Bessemer

The City of Bessemer's Street and Sanitation Department provides twice weekly residential and small commercial garbage collection services. This waste is compacted during collection and then transported to the Jefferson County Johns Transfer Station for ultimate disposal at the Jefferson County Landfill No. 1 (Mt. Olive Landfill). Larger commercial businesses are allowed to utilize any private collection agency they choose.

Birmingham

(The City of Birmingham has opted out of the Jefferson County 2015 SWMP Update) Approximately 95% of Birmingham's residential solid waste and 2% of the commercial solid waste is collected by the City of Birmingham and taken to one of their two MSW landfills for disposal. Private collection agencies pick up approximately 5% of the residential waste (including the waste from all apartment buildings and the Birmingham Housing Authority's properties), and approximately 98% of the commercial waste. This solid waste is taken to several other area landfills for disposal.

Brighton

The City of Brighton currently has a contract with Republic Services to provide weekly residential collection services. Commercial businesses are allowed to utilize any collection agency they choose. This solid waste is taken to a local Transfer Station or to one of several area landfills for disposal.

Brookside

Republic Services (dba Allied Waste) provides residential garbage collection services under contract to the Town of Brookside. There is very little to no commercial business in Brookside. This solid waste is taken to a local Transfer Station or to one of several area landfills for disposal.

Cardiff

Municipal solid waste in this area is currently being collected by a County Franchise Hauler. This waste is taken to a County-owned Transfer Station or landfill for disposal.

Center Point

Municipal solid waste collection in the City of Center Point is provided under contract with Advanced Disposal Services. This solid waste is compacted during collection and transported to the Star Ridge Landfill in St. Clair County.

Clay

The City of Clay currently has a contract with Republic Services to provide weekly residential collection services. Commercial businesses are allowed to utilize any collection agency they choose. This solid waste is taken to a local Transfer Station or to one of several area landfills for disposal.

Fairfield

The City of Fairfield currently has a contract with Republic Services to provide weekly residential and commercial collection services. This solid waste is taken to a local Transfer Station or to one of several area landfills for disposal.

Fultondale

Residential solid waste collection in the City of Fultondale is provided twice weekly under contract to Advanced Disposal Services. Commercial businesses are allowed to utilize any collection agency they choose. The solid waste is compacted during collection and transported to a local MSW landfill for disposal.

Gardendale

Weekly residential garbage collection services in Gardendale are currently contracted to Republic Services. Commercial businesses are allowed to utilize any collection agency they choose. This waste is compacted during collection and transported to a local landfill for disposal.

Graysville

The City of Graysville Sanitation Department provides weekly garbage collection services for residential and small commercial customers in the City. This waste is compacted during collection and transported to the Green Mountain Landfill in Adamsville for disposal. Larger commercial businesses are allowed to utilize any collection agency they choose.

Homewood

The City of Homewood provides curbside garbage collection for its residential and commercial customers twice weekly. This waste is compacted during collection and transported to the Green Mountain Landfill in Adamsville for disposal.

Hoover

Twice weekly residential garbage collection services for the City of Hoover are currently contracted with Republic Services. The solid waste is compacted during collection and transported to a local Transfer Station or to one of several area landfills for disposal. Commercial businesses are allowed to use any collection agency for the disposal of their solid waste.

Hueytown

Republic Services (dba Allied Waste) provides weekly residential and limited commercial garbage collection services under contract to the City of Hueytown. The solid waste is compacted during collection and transported to the BFI Pine View Landfill in Walker County for disposal. Larger commercial businesses are allowed to use any collection agency for the disposal of their solid waste.

Irondale

The City of Irondale Public Works Department provides curbside residential garbage collection twice a week. This waste is compacted during collection and taken to Advanced Disposal's Star Ridge Landfill in St. Clair County for disposal. Commercial businesses are allowed to utilize any collection agency they choose.

Kimberly

Residential and commercial garbage collection services for the Town of Kimberly are currently contracted to Waste Pro. Curbside collection is provided twice weekly. This waste is compacted during collection and transported to the Jefferson County Landfill No. 1.

Leeds

Residential and commercial garbage collection service in Leeds is currently contracted to Advanced Disposal (the previous contract was for residential collections only). Curbside residential collection is provided once weekly. This waste is compacted during collection and transported to Advanced Disposal's Star Ridge Landfill in St. Clair County for disposal.

Lipscomb

Residential and commercial garbage collection services for Lipscomb are currently contracted to Republic Services. Curbside collection is provided once weekly. This waste is compacted during collection and transported to a local Transfer Station or to one of several area landfills for disposal.

Maytown

Municipal solid waste in Maytown is collected by a County Franchise Hauler. This waste is taken to a County-owned Transfer Station or landfill for disposal.

Midfield

Midfield currently has a contract with Republic Services to provide twice weekly residential and small commercial collection services. This solid waste is taken to a local Transfer Station or to one of several area landfills for disposal. Large commercial businesses are allowed to utilize any collection agency they choose.

Morris

Weekly residential garbage collection service for the Town of Morris is currently provided under a contract with Waste Management/Waste Away Group. The solid waste is typically transported to the Jefferson County Landfill No. 1 (Mt. Olive Landfill) for disposal. Commercial businesses are allowed to utilize any collection agency they choose.

Mountain Brook

Waste Management provides residential and commercial garbage collection services under contract to the City of Mountain Brook. Residential collections are provided once a week and

commercial collections are provided twice weekly. The solid waste is compacted during collection and transported to the Jefferson County Landfill No. 1 (Mt. Olive Landfill).

Mulga

Municipal solid waste in Mulga is collected by a County Franchise Hauler. This waste is taken to a County-owned Transfer Station or landfill for disposal.

North Johns

Municipal solid waste in North Johns is collected by a County Franchise Hauler. This waste is taken to a County-owned Transfer Station or landfill for disposal.

Pinson

Municipal solid waste collection in Pinson is typically provided by Advanced Disposal Services. This waste is compacted during collection and transported to Advanced Disposal's Star Ridge Landfill in St. Clair County for disposal.

Pleasant Grove

Weekly residential garbage collection service for Pleasant Grove is currently contracted to Waste Management. The solid waste is compacted during collection and transported to a local MSW landfill for disposal. Commercial businesses are allowed to use any private collection agency for the disposal of their solid waste.

Tarrant

Weekly residential garbage collection services for the City of Tarrant are currently contracted with Republic Services (dba Allied Waste). This solid waste is taken to a local Transfer Station or to one of several area landfills for disposal. Commercial businesses are allowed to use any private collection agency for the disposal of their solid waste.

Trafford

Municipal solid waste in the Town of Trafford is collected once each week under contract with Republic Services (dba Allied Waste). This solid waste is taken to a local Transfer Station or to a local landfill for disposal.

Trussville

The City of Trussville currently has a contract with Advanced Disposal to provide weekly residential and small commercial collection services. This waste is compacted during collection and transported to Advanced Disposal's Star Ridge Landfill in St. Clair County for disposal. Large commercial businesses are allowed to utilize any collection agency they choose.

Vestavia Hills

Twice weekly residential garbage collection services for Vestavia Hills are currently contracted with Republic Services. The solid waste is compacted during collection and transported to one of several area landfills for disposal. Commercial businesses are allowed to use any private collection agency for the disposal of their solid waste.

Warrior

Weekly residential and commercial garbage collection services in Warrior are currently contracted to Republic Services. This waste is compacted during collection and transported to the Jefferson County Landfill No. 1 for disposal.

West Jefferson

Weekly residential garbage collection service for the Town of West Jefferson is currently contracted with Republic Services (dba Allied Waste). The solid waste is compacted during collection and transported to a local Transfer Station or to one of several area landfills for disposal. Commercial businesses are allowed to use any private collection agency for the disposal of their solid waste.

Unincorporated/Other Jefferson County

Currently, three (3) franchise solid waste collectors operate under Jefferson County's Solid Waste Program to provide residential solid waste collection and transportation services for specific areas of unincorporated Jefferson County and some of the smaller municipalities. Commercial businesses typically either contract directly with private haulers for solid waste collection services or transport their solid waste to a local MSW landfill or Transfer Station themselves.

3.3 CONSTRUCTION/DEMOLITION SOLID WASTE

Construction/demolition (C/D) wastes are typically collected and transported to a C/D landfill by the generator of the waste, a municipality, the county, or a 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 Jefferson County Commission

The Jefferson County Department of Roads and Transportation collects some C/D debris and storm-related debris on county road right-of-ways. This material is taken to one of the County's landfills (currently being leased to Santek Environmental) for disposal.

3.3.2 Municipalities

Several municipalities in Jefferson County collect yard waste or other C/D material separately from their municipal solid waste.

Bessemer

The Bessemer Street and Sanitation Department collects yard waste and other inert material separately from municipal solid waste. This material is taken to Bessemer's Raimond-Muscoda Landfill for disposal.

Brighton

Yard waste and other inert materials are collected curbside by Republic Services (dba Allied Waste) under a separate contract with the Town of Brighton. This waste is taken to one of several area landfills for disposal.

Center Point

Yard waste is collected separately from municipal solid waste as part of Advanced Disposal's contract with the City. This material is taken to the Star Ridge Landfill in St. Clair County for disposal.

Clay

Yard waste and other inert materials are collected curbside by Republic Services under a separate contract with the City of Clay. This waste is taken to one of several area landfills for disposal.

Fairfield

The Fairfield Street & Sanitation Department provides curbside collection of yard waste. This waste is taken to the Sylvan Springs Waste Complex for disposal.

Gardendale

The Gardendale Public Works Department collects yard waste separately from the municipal solid waste. Some of this material is taken to the Jefferson County Landfill No. 1 Inert Cell, and some is chipped/shredded and placed in a ravine on City property.

Graysville

The City of Graysville provides separate yard waste and household debris (C/D material) collection services once each month. The yard waste is taken to City property for disposal. The household debris is taken to the Green Mountain Landfill in Adamsville for disposal.

Homewood

Yard waste is collected by the City of Homewood each week and taken to the Green Mountain Landfill in Adamsville for disposal.

Hueytown

The Hueytown Street Department collects yard waste as needed in the city limits. This waste is disposed of on City property.

Irondale

The Irondale Street Department collects yard debris each week. This material is taken to the Star Ridge Landfill in St. Clair County.

Leeds

Prior to October 1, 2014, the City of Leeds Street Department collected yard waste and other inert materials each week. Brush and limbs were chipped on city property and used as a fuel source at a local concrete plant. Leaves and other non-combustible materials were taken to the Star Ridge Landfill in Moody for disposal. Beginning October 1, 2014, curbside rubbish and yard waste collections are included in the City's contract with Advanced Disposal.

Lipscomb

Curbside yard waste collections are included in Lipscomb's municipal solid waste collections contract with Republic Services. Residents are allowed up to two collections per month under the contract.

Midfield

Yard waste is collected once each week by the Midfield Public Works Department. Leaves are taken to be composted at Burford's Wood Waste Recycling in Birmingham. The remaining yard waste is taken to the Sylvan Springs Waste Complex for disposal.

Mountain Brook

Yard waste such as brush and limbs is collected by Waste Management (subcontracted to Nature Chasers) separately from the municipal solid waste each week. Leaves are picked up by the City's Public Works Department and are composted on city property. Residents are allowed to purchase this compost for a small fee.

Tarrant

The City of Tarrant owns and operates its own C/D landfill. The City's Public Works Department collects yard waste on a weekly basis. This waste is taken to the Tarrant C/D Landfill for disposal.

Trussville

Limb and brush service is provided for residents in Trussville under the City's contract with Advanced Disposal.

Vestavia Hills

Curbside yard waste collections are included in Vestavia Hills' municipal solid waste collections contract with Republic Services. This waste is taken to one of several area landfills for disposal.

Warrior

Yard waste is collected by Warrior's Public Works Department and transported to the Jefferson County Landfill No. 1 Inert Cell for disposal.

3.3.3 Private Haulers

Numerous private companies provide C/D collection (roll-off) services in Jefferson County. This material is typically delivered to a Transfer Station or a local C/D or MSW landfill for disposal.

3.4 INDUSTRIAL SOLID WASTE

Several large industries in Jefferson County have Industrial Solid Waste (ISW) landfills specifically permitted for the disposal of solid waste generated by that industry. In these instances, this industrial solid waste is typically collected and transported to the ISW landfill by that industry. Otherwise, private haulers contract with industries to transport their waste to an authorized landfill for disposal.

3.5 SPECIAL WASTE

Special wastes can be collected and transported to a Municipal Solid Waste (MSW) landfill by a municipality, county, business, or contract hauler. Various methods are used for the transport of Special Wastes but may 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.

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, nearly twenty MSW landfills, C/D landfills and Industrial Landfills were used for the disposal of solid waste generated in the “covered area” of Jefferson County. In addition, one transfer station and one drop-off convenience center was also used to process solid waste that was generated in the County. 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 Jefferson County Landfill No. 1 (Permit No. 37-43)

The Jefferson County Landfill No. 1, more commonly referred to as the Mt. Olive Landfill, is located at 101 Barber Blvd. in Gardendale, Jefferson County, Alabama. This landfill is designated to accept municipal solid waste from Jefferson, Bibb, Blount, St. Clair, Shelby, Tuscaloosa and Walker Counties in Alabama. This landfill is owned by the Jefferson County Commission, but the site, operations and management of the landfill are leased to Santeck Environmental of Alabama, LLC. An average of 1,500 tons of solid waste can be accepted at this landfill per day. In 2013, approximately 224,835 tons of municipal solid waste was disposed of in this landfill (209,541.51 tons were from Jefferson County). In addition, 9,117.72 tons of Special Waste generated in Jefferson County was disposed of in this landfill in 2013.

“Reasonable expansion” activities at the Jefferson County Landfill No. 1 include constructing additional disposal cells which have already been permitted and will provide more than 50 years of disposal capacity at this landfill.

The Jefferson County Landfill No. 1 also contains an inert cell for the disposal of construction/demolition debris, yard wastes and other inert material (see Section 4.3.1 for more information on this cell).

4.2.2 Jefferson County Landfill No. 2 (Permit No. 37-44)

Jefferson County Landfill No. 2, also known as the Turkey Creek Landfill, is located in northeastern Jefferson County at 7035 Narrows Road, Pinson. This Subtitle D municipal solid waste landfill is owned by the Jefferson County Commission, but the site, operations and management are leased to Santek Environmental of Alabama, LLC. This landfill can accept an average of 1,300 tons per day of solid waste generated in Jefferson County only. During 2013, approximately 1,116.35 tons of solid waste was disposed of in this landfill. Currently, the site is predominantly used as a transfer station with ultimate disposal at the Jefferson County Landfill No. 1. At the current disposal rate, greater than 20 years of disposal capacity remains in the currently usable cells. More than 50 years of disposal capacity remains at this site when all future expansion activities are considered.

4.2.3 Green Mountain Management, LLC Solid Waste Facility (Permit No. 37-48)

The Green Mountain Management, LLC Solid Waste Facility is located at 100 Green Mountain Parkway, Adamsville. This landfill contains separate MSW and C/D disposal areas, and is owned/operated by Green Mountain Management, LLC. A maximum average daily volume of 25,000 tons of municipal solid waste, C/D waste, rubbish, tires and other nonhazardous waste from the 48 contiguous United States can be disposed of at this landfill on a daily basis. In 2013, approximately 28,167 tons of municipal solid waste was disposed of at this landfill, including 23,000 tons that were generated in Jefferson County. In addition, approximately 88,000 tons of Special Waste was disposed of at this landfill in 2013.

“Reasonable expansion” activities at the Green Mountain Landfill include constructing additional disposal cells which have already been permitted. At the current disposal rates, these cells will provide more than 200 years of disposal capacity at this landfill.

4.2.4 Star Ridge Landfill (Permit No. 58-05)

The Star Ridge Landfill is a Subtitle D municipal solid waste landfill that is owned and operated by Advanced Disposal Services. This landfill is located in St. Clair County and is permitted to accept waste from the state of Alabama. The permitted capacity of this landfill is 1,500 tons of solid waste per day. During 2013, approximately 168,097 tons of municipal solid waste was disposed of in this landfill (approximately 79,336 tons from Jefferson County). In addition, approximately 2,878 tons of Special Waste was disposed of in this landfill in 2013.

“Reasonable expansion” activities at the Star Ridge Landfill include constructing additional disposal cells which have already been permitted and will provide more than 50 years of disposal capacity at this landfill.

4.2.5 Highway 70 Landfill (Permit No. 59-15)

The Highway 70 Landfill is a Subtitle D municipal solid waste landfill owned and operated by the Shelby County Commission. Approved C/D waste is also accepted for disposal. This landfill is located in Shelby County and is permitted to accept waste from several counties in Alabama, including Jefferson County. The permitted capacity of this landfill is 1,500 tons per day. In 2013, approximately 581.15 tons of MSW waste and 140.73 tons of C/D waste that were generated in the City of Hoover were disposed of at this landfill. More than 50 years of disposal capacity remains available in the permitted cells (>10 years capacity in the currently constructed cells) and there are no immediate plans for expansion at this facility.

4.2.6 BFI Pine View Sanitary Landfill (Permit No. 64-11)

The BFI Pineview Landfill, located at 2730 Bryan Road, Dora, Walker County, Alabama is designated to accept municipal solid waste from Blount, Cullman, Fayette, Jefferson, Marion, Shelby, Tuscaloosa, Walker and Winston Counties in Alabama. This landfill is owned/operated by Republic Services. The permitted volume of the Pineview Landfill is 1,500 tons of solid waste per day. In 2013, approximately 370,000 tons of solid waste was disposed of in this landfill, with an estimated 226,064 tons of that total being generated in Jefferson County. In addition, 15,432 tons of Special Waste generated in Jefferson County were also disposed of in this landfill.

Future expansion activities at the Pineview Landfill include constructing additional disposal cells that have already been permitted. Taking into consideration the reasonable expansion activities and the current disposal rate, more than 30 years of disposal capacity remain at this landfill.

4.3 CONSTRUCTION AND DEMOLITION LANDFILLS

4.3.1 Bessemer City – Concord Landfill (Permit No. 37-29)

The Concord Landfill is owned and operated by the City of Bessemer and is permitted to accept C/D material from several area municipalities and private haulers in southwest Jefferson County. This landfill is permitted to accept an average of 450 cubic yards per day; however it is not currently being used and has no remaining capacity. All C/D waste picked up by the City of Bessemer is being disposed of at the City's Raimund-Muscoda Inert Landfill.

4.3.2 Think Pink, Inc. Coalburg Road Landfill (Permit No. 37-34)

The Think Pink, Inc. Coalburg Road Landfill is currently permitted to accept 200 tons per day of C/D material, rubbish and tires from throughout the State of Alabama. According to quarterly ADEM volume reports for the past several years, only very small quantities of C/D material have been disposed of in this landfill each quarter, if any at all. Less than 50 tons of material was reported as being disposed here in 2013. Efforts to reach this landfill for capacity information were unsuccessful; therefore the remaining capacity is unknown.

4.3.3 Tarrant Landfill (Permit No. 37-35)

The Tarrant Landfill is owned, operated and utilized only by the City of Tarrant for the disposal of C/D waste, rubbish and tires. The permitted capacity of this landfill is 15 tons per day and approximately 3,119 tons of material was disposed of at this landfill in 2013. At the current disposal rate, approximately 10 years of capacity remains available in the currently permitted cells. In 2008, the City of Tarrant purchased 10 additional acres and is waiting on ADEM's approval for another 1 acre cell. The remaining 9 acres may be submitted in the future for permitting.

4.3.4 Raimund-Muscoda Inert Landfill (Permit No. 37-42)

The Raimund-Muscoda Inert Landfill is owned and operated by the City of Bessemer and is permitted to accept C/D material, rubbish and other inert material from the cities of Bessemer, Pleasant Grove and Hueytown. This landfill is permitted to accept an average of 75 tons per day. In 2013, approximately 57,991.5 cubic yards of C/D material was disposed of at this landfill. Approximately 10 years of disposal capacity remains available at the Raimond-Muscoda Inert Landfill for the City of Bessemer.

4.3.5 Jefferson County Landfill No. 1, Inert Cell (Permit No. 37-43)

The Inert Cell of the Jefferson County Landfill No. 1 accepts C/D and yard wastes from several municipalities, private haulers, and the Jefferson County Roads & Transportation Department. During 2013, approximately 22,884.4 tons of C/D material were delivered to and disposed of in this landfill cell. At the current disposal rate, greater than 20 years of capacity remains for the disposal of inert material at this landfill.

4.3.6 Fultondale Waste Complex (Permit No. 37-45)

The Fultondale Waste Complex, located at 3111 Five Mile Creek Road, Fultondale, is owned and operated by Waste Away Group, Inc. (Waste Management). This landfill is permitted to accept C/D waste, rubbish, tires and asbestos from the states of Alabama, Georgia, Tennessee and Mississippi. A maximum average daily volume of 5,000 tons per day of waste can be disposed of at this landfill. Approximately 49,683.14 tons of C/D material from Jefferson County were disposed of in 2013 at this landfill. At the current disposal rate, more than 20 years of capacity remains available.

4.3.7 Green Mtn Management, LLC Solid Waste Facility – C/D Area (Permit No. 37-48)

The Green Mountain Management, LLC Solid Waste Facility also contains a separate C/D disposal area in addition to its MSW area. A maximum average daily volume of 25,000 tons of municipal solid waste, C/D waste, rubbish, tires and other nonhazardous waste from the 48 contiguous United States can be disposed of at this landfill on a daily basis. During 2013, approximately 21,280 tons of C/D waste was disposed of in the inert cell (approximately 16,750 tons were generated in Jefferson County). Additional cells that have already been permitted can

be constructed in the future, which provides more than 200 years of disposal capacity at this landfill.

4.3.8 B & B Tire Landfill (Permit No. 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 landfill is permitted to accept a maximum daily average of 100 tons per day. In 2013, approximately 16,916 tons of C/D waste were disposed at this landfill (approximately 950 tons were generated in Jefferson County).

Considering the permitted capacity of 100 tons per day (25,500 tons per year), approximately 16 years of disposal capacity remain. This landfill is expanded to capacity with no more room currently available for future expansion.

4.3.9 WCA/Blount Landfill (Permit #05-08)

The WCA/Blount Landfill, located at 1130 County Line Rd in Trafford, Blount County is designated to accept C/D waste and rubbish, foundry waste, tires and asbestos from the State of Alabama. The landfill is owned and operated by Blount Recycling, LLC and the permitted capacity is 500 tons per day. According to ADEM records, approximately 40,457 tons of C/D and other inert waste were disposed of at this landfill in 2013. The landfill manager estimates that approximately 60% - 70% of this total tonnage was generated in Jefferson County. Using an average of 65%, it is estimated that 26,297 tons of C/D waste generated in Jefferson County in 2013 was disposed of at this landfill. Considering current disposal rates and the 220 acres that have been permitted for C/D disposal, this landfill has more than 200 years of capacity remaining on site. Additional acreage may be permitted in the future as needed.

4.4 INDUSTRIAL LANDFILLS

Several large industries in Jefferson County have Industrial Solid Waste (ISW) landfills specifically permitted for the disposal of solid waste generated by that industry. A privately owned landfill in Jefferson County has also recently changed its classification from a C/D

Landfill to an Industrial Landfill (see Section 4.4.6). In addition, at least one Industrial Landfill that is located outside of Jefferson County accepts Industrial and C/D waste that was generated in Jefferson County.

4.4.1 Miller Steam Plant (Permit No. 37-16)

The Miller Steam Plant Industrial Landfill in western Jefferson County is owned and operated by the Alabama Power Company for the disposal of C/D waste, rubbish, spent anion/cation resins, sandblasting waste, and other inert waste generated at the Miller Steam Plant in Quinton, Alabama only. This landfill is permitted to accept a maximum volume of 10 cubic yards of approved waste per day. In 2013, approximately 16 tons of these wastes were disposed of in this landfill. At the current disposal rate, it is estimated that more than 20 years of capacity remains. Coal Combustion Residuals are also generated at the Miller Steam Plant in much larger quantities; however these residuals are currently being managed in a surface impoundment rather than in a landfill. Future federal regulations may change the way these wastes are managed in the future.

4.4.2 Bond Industries Bessie Landfill (Permit No. 37-32)

The Bond Industries Bessie Landfill (formerly owned/operated by US Pipe & Foundry Co. and called the Bessie Mine Landfill) is now owned and operated by Bond Industries, Inc. This landfill is located in northwest Jefferson County and was previously used for the disposal of solid waste generated in the manufacture of ductile iron pipe and fittings. The permitted capacity of this landfill is 400 tons per day; however the landfill has not accepted any new waste for several years. Currently, metal reclamation activities are being performed at the landfill. The remaining capacity of this landfill is not known.

4.4.3 US Pipe & Foundry Co. Mine #3 (Permit No. 37-33)

The US Pipe & Foundry Co. Mine #3 in southwest Jefferson County is owned and operated by the US Pipe & Foundry Co. for the disposal of solid waste generated in the manufacture of ductile iron pipe and fittings. The permitted capacity of this landfill is 750 tons per day and approximately 75,315 cubic yards (18,829 tons) of solid waste were disposed of in this landfill in

2013. It was reported that more than 50 years of capacity remains in the current landfill footprint.

4.4.4 ACIPCO Landfill No. 1 (Permit No. 37-39)

The ACIPCO Landfill No. 1, located in central Jefferson County, is owned and operated by the American Cast Iron Pipe Company (ACIPCO) for the disposal of solid waste generated in the manufacture of ductile iron pipe and fittings, such as general foundry waste, sand and slag. Although this landfill is permitted to receive a maximum daily volume of 29.5 tons per day of solid waste, only 50 tons of waste was disposed of in this landfill in all of 2013. According to survey results, more that 30 years of capacity remains at this landfill.

4.4.5 ACIPCO Landfill No. 2 (Permit No. 37-41)

The ACIPCO Landfill No. 2 is also owned and operated by the American Cast Iron Pipe Company (ACIPCO) for the disposal of solid waste generated in the manufacture of ductile iron pipe and fittings, such as general foundry waste, sand and slag. This landfill is permitted to receive a maximum daily volume of 500 tons of approved solid waste per day. Approximately 30,000 tons of solid waste was disposed of in this landfill in 2013. According to survey results, more that 30 years of capacity remains at this landfill.

4.4.6 Sylvan Springs Waste Complex (Permit No. 37-46)

The Sylvan Springs Waste Complex, which is also known as the Amwaste/Matter Management Landfill, is located at 1400 Porter Road in Sylvan Springs. This landfill was previously permitted as a Construction/Demolition Landfill, but was re-permitted as an Industrial Landfill in 2012. This landfill is owned and operated by Matter Management Birmingham, LLC and is permitted to receive C/D, rubbish, and tires from the entire United States at a rate of 2,500 tons per day. In 2013, approximately 75,273 tons of solid waste was disposed of in this landfill; approximately 38,400 tons of this amount were generated in Jefferson County. According to survey results, more that 25 years of capacity remains at this landfill. However, according to the operator, all design and construction options to maximize the disposal capacity at the existing permitted facility will be pursued to increase this amount. Opportunities for expansion will also be explored in the future.

Recycling services are also provided at this landfill. Tonnages were not requested since the Town of Sylvan Springs has opted out of the Jefferson County SWMP and will be submitting their own updated Plan.

4.4.7 WCA of Alabama, LLC Industrial Landfill (Permit No. 61-16)

The WCA of Alabama, LLC Industrial Landfill, which is also known as the Fines Industrial Landfill, is located at 13737 Plant Road in Alpine, Talladega County, Alabama. This landfill is permitted as an Industrial Landfill, but is also permitted to accept C/D waste, asbestos, automobile shredder dirt and fluff, and tires from several counties in Alabama, including Jefferson County. According to ADEM records, approximately 25,654 tons of solid waste was disposed of in this landfill in 2013. A WCA representative estimates that 5% - 10% of the waste received at this landfill was generated in Jefferson County. Using an average of 7.5% of the total, an estimated 1,924 tons of solid waste from Jefferson County was disposed of in this landfill in 2013. With a maximum average daily volume of 750 tons of solid waste per day, more than 50 years of capacity remains at this landfill.

4.5 SOLID WASTE TRANSFER STATIONS

In addition to the MSW landfills currently being used for the disposal of solid waste generated in Jefferson County, there is also one transfer station and one “public convenience center” currently being used to process/consolidate solid waste generated in the county. Another transfer station is permitted for operation in Jefferson County, but is not currently being used.

4.5.1 Johns Road Transfer Station

The Johns Road Transfer Station, located at 5125 Johns Road, Bessemer, is owned by the Jefferson County Commission, but operation of the transfer station is leased to Santek Waste Services. Solid waste from area residents, contract haulers, and from the Peabody Convenience Center is collected at this transfer station and transported by Santek to the Jefferson County Landfill No. 1 (Mt. Olive Landfill). During 2013, approximately 68,406.77 tons of solid waste from this transfer station was taken to Landfill No. 1.

4.5.2 Waste Management of Alabama – Birmingham Transfer Station

The Waste Management – Birmingham Transfer Station is located at 700 Clow Road in Tarrant. Although the permit for this Transfer Station is being maintained by Waste Management, the station has not been in operation for over four years, with no plans to resume operations in the near future. However, the option to re-open this Transfer Station at any time shall remain available to Waste Management.

4.5.3 Jefferson County Peabody Convenience Center

The Jefferson County Peabody Convenience Center is a drop-off site for rural western Jefferson County residential use and accepts household waste only. This convenience center is located at 11510 Lock 17 Road in Bessemer, on a small area of the now closed Peabody Landfill. The solid waste collected here is taken to the Johns Transfer Station, for ultimate disposal at the Jefferson County Landfill No. 1. In 2013, approximately 108.64 tons of solid waste was processed at this facility. Due to its low usage rate, this convenience center may be closed in the future.

4.6 INCINERATORS

There are currently no solid waste incinerators located in Jefferson 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 in the future.

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.)
- 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

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 governmental and private entities in Jefferson County that actively participate in recycling. Recyclable materials are typically collected on routes separate from MSW collections or under specialized contracts with area businesses (i.e. cardboard baling and recycling). A few municipalities and most private recycling agencies rely on citizen drop-off of recyclable materials.

Each governmental agency in Jefferson County 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.

5.3.1 Jefferson County Commission Recycling

Although there are not currently any recycling activities taking place at any of the County's solid waste facilities, Jefferson County has periodically sponsored an electronics recycling program and may partner with other organizations or governmental entities in the future to host recycling events or programs.

5.3.2 Municipalities

Bessemer

The City of Bessemer has a recycling center for citizen drop-off of newsprint, cardboard and plastic. In 2013, approximately 45 tons of these materials were recycled in the City of Bessemer. This material is sold to various recycling brokers.

Center Point

The City of Center Point has a recycling trailer at the courthouse for citizen drop-off of newspaper, mixed paper, cardboard and plastic. In 2013, approximately 208 tons of recyclable materials were picked up by Waste Pro of Alabama for further processing or recycling.

Irondale

The City of Irondale began a weekly curbside recycling program in June 2014 for the collection of plastics, cardboard, mixed paper, aluminum and ferrous metals. During a pilot program in 2013, approximately 143 tons of mixed recyclables was either collected on routes or dropped off for recycling.

Leeds

The City of Leeds has a new recycling center at 1140 9th Street for the collection of metals, paper goods, cardboard and plastic. Although some of these materials were collected at the Public Works Department in 2013, records of tonnages recycled were not readily available.

Mountain Brook

Waste Management provides curbside recycling under their solid waste collections contract with the City of Mountain Brook. In 2013, approximately 1,469 tons of mixed paper, plastic, cardboard and metals were recycled in Mountain Brook. This material was taken to Birmingham Recycling and Recovery for processing.

Clay, Gardendale, Hoover, Hueytown, Pleasant Grove, Vestavia Hills

Republic Services of Birmingham provides curbside recycling collection services as part of their solid waste collections contract with the municipalities listed above. In 2013, approximately

19,264 tons of these materials were collected and taken to various companies (HRH Metals, Birmingham Recycling and Recover, AMM, Jordan Metals, Regional Recycle, Tuscaloosa Recycle and Tuscaloosa Metal) for further processing and recycling.

TABLE 5-1
MATERIALS RECYCLED BY JEFF. CO. MUNICIPALITIES IN 2013

Materials Recycled in 2013 (tons)	Bessemer	Center Point	Irondale	Mountain Brook	Clay, Gardendale, Hoover, Hueytown, Pleasant Grove, Vestavia Hills (via Republic)
Newspaper	33.88	X	X	X	X
Corrugated Cardboard	10.94	X	X	X	X
Mixed Paper	-	X	X	X	X
Aluminum	-	-	X	X	X
Plastic	-	X	X	X	X
Ferrous Metals	-	-	X	X	X
Other Metals	-	-	-	X	749
Commingled Recyclables	-	208	143	1468.80	18,515
Totals:	44.82 tons	208 tons	143 tons	1,468.80 tons	19,264 tons

5.3.3 Private Industry

There are several private businesses or agencies located in Jefferson County that collect or process recyclable materials. Several of these are located inside Birmingham’s city limits. Since the City of Birmingham opted out of the Jefferson County SWMP, none of the businesses or agencies located inside the city limits were surveyed for recycling information.

Although most of the businesses or agencies surveyed were cooperative when asked to provide tonnages and descriptions of the types of materials currently being recycled in Jefferson County, a few of the businesses refused to provide any information for this SWMP. Therefore, the

tonnages reported below most likely underestimate the actual tonnage of materials currently being recycled in Jefferson County. Information is provided below for those businesses or agencies that cooperated by providing recycling data.

Advanced Technology Recycling

Located in Hoover, Advanced Technology Recycling provides drop-off bins and customer pickup service for various metals and electronics. In 2013, approximately 8.64 tons of materials were collected and sent to various recycling brokers for further processing or recycling.

Alabama Power Company – Miller Steam Plant

Recycling containers are staged throughout Alabama Power's Miller Steam Plant for the recycling of paper, cardboard, aluminum, plastic, ferrous metals and other metals. In 2013, approximately 848 tons of these materials were collected and sent to various recycling brokers or agencies for further processing or recycling.

American Recycling Company

American Recycling Company provides a pickup service for mixed paper in Birmingham. In 2013, approximately 78.83 tons of mixed paper were collected and sold to a paper mill for reuse.

Bermco Aluminum

Bermco Aluminum purchases aluminum and other metals from scrap dealers nationwide, melts these materials into secondary aluminum and sells them. In 2013, approximately 57,677 tons of aluminum and other metals were removed from the waste stream and recycled.

First Avenue Recycling

First Avenue Recycling in Bessemer provides drop-off bins for the recycling of aluminum, ferrous metals and other metals. In 2013, approximately 1,050 tons of these materials were collected and sent to various recycling brokers or agencies for further processing or recycling.

Moore Coal Company

Located in Bessemer, Moore Coal Company provides drop-off bins and also collects various recyclables on collection routes throughout the county. Typical materials collected include newspaper, mixed paper, cardboard, aluminum, ferrous metals and other metals. In 2013, approximately 487 tons of these materials were collected and sold to various recycling brokers for further processing or recycling.

Recycle USA, Inc.

Located in Pinson, Recycle USA collects aluminum, ferrous metals and other metals from citizens in the area. In 2013, approximately 12,069 tons of these materials were collected and sold to various recycling brokers for further processing or recycling.

Tube City, Inc.

Located in Fairfield, Tube City collects ferrous and other metals and sells them to several area steel mills for reuse. In 2013, approximately 155,000 tons of these materials were removed from the waste stream and recycled.

Grocery, Retail and Home Improvement Industry

Several supermarkets, retail, and home improvement stores in Jefferson County currently recycle plastic bags, corrugated cardboard, rechargeable batteries, or other materials. The material is typically picked up at each store location by 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 Jefferson County.

Automotive Industry

Several automotive service stores in Jefferson 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 Jefferson County.

TABLE 5-2

MATERIALS RECYCLED BY JEFF. CO. BUSINESSES IN 2013

Materials Recycled in 2013 (tons)	Advanced Technology Recycling	Alabama Power – Miller Steam Plant	American Recycling Company	Bermco Aluminum	First Avenue Recycling Corp	Moore Coal Company	Recycle USA, Inc.	Tube City, Inc.
Newspaper	-	-	-	-	-	40	-	-
Corrugated Cardboard	-	20	-	-	-	282	-	-
Mixed Paper	-	4	78.83	-	-	68	-	-
Aluminum	-	3.4	-	49,766	200	5.2	727	-
Plastic	-	0.5	-	-	-	-	-	-
Ferrous Metals	6.6	813	-	-	600	84	9,602	105,000
Other Metals		6.8	-	7,911	250	7.6	1,640	50
Electronics	2.04	-	-	-	-	-	100	-
Totals:	8.64 tons	847.7 tons	78.83 tons	57,677 tons	1,050 tons	486.8 tons	12,069 tons	155,000 tons

5.4 PLANNED RECYCLING PROGRAMS

There are currently no other known recycling programs planned for Jefferson County. However, the option to start an additional recycling program, or make changes to an existing recycling program, shall remain available to each covered jurisdiction throughout the planning period of this SWMP.

5.5 JOINT VENTURES FOR RECYCLING

There are currently no known recycling joint venture programs planned for Jefferson County or its covered municipalities. However, the option to start a joint venture recycling program shall remain available to each covered jurisdiction throughout the planning period of this SWMP.

5.6 IMPACT OF RECYCLING ON WASTE GENERATED

According to survey results, at least **248,347 tons of materials** were removed from the waste stream through recycling efforts in Jefferson County in 2013 (some of these materials are assumed to have been generated outside of Jefferson County). It is very likely that the amount of materials currently being recycled in Jefferson County is actually larger than that reported. As mentioned previously, a few private companies refused to provide any survey information. In addition, some municipalities or businesses did not have the tonnages of materials being recycled readily available. There are also several other private recycling companies that are located inside the city limits of Birmingham; therefore they were not included in the survey requests for the Jefferson County SWMP.

By recycling these materials, the overall tonnage of solid waste disposed of in a landfill was reduced by at least 248,347 tons, which conserves valuable landfill space. Waste management costs (collection, transportation, processing and disposal) are also reduced by removing these materials from the waste stream.

CHAPTER 6

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

Several of the County's municipalities require mandatory residential solid waste collection. Regulations state that all municipal solid waste must be disposed of in an MSW landfill that has been designed in accordance with Subtitle D regulations. All of Jefferson County's MSW landfills have been designed to meet these Subtitle D regulations. Compliance with these regulations is assured through state-issued permits and periodic inspections by regulatory agencies. These facilities also adhere to the operating criteria, groundwater and landfill gas monitoring requirements, corrective action requirements, financial assurance requirements, and closure/post-closure care requirements of Subtitle D as well as applicable air permits.

CHAPTER 7

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. Jefferson County actively investigates illegal dump sites in unincorporated areas and prosecutes those responsible in accordance with local ordinances and State laws if ownership can be established. Responsible parties are also encouraged to clean up their site within 24 hours in return for non-prosecution. Most municipalities in Jefferson County have similar ordinances against illegal dumping.

7.2 PROCEDURES FOR THE ELIMINATION OF UNAUTHORIZED DUMPS

Volunteers and County personnel are typically used to pick up litter and clean up small unauthorized dump sites when found, if they are on public road right-of-way. Once a problematic area has been cleaned, fencing or other barriers and/or “No Dumping” signs can be installed.

Both Jefferson County landfills have experienced problems with illegal dumping along the landfill roads after hours and on weekends. This issue is currently being addressed by the company that leases these landfills (Santek). County deputies also patrol these 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.

CHAPTER 8

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 fluctuations in the 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 Jefferson County will be applied to the “covered” municipalities and used to estimate municipal populations for 2015 through the end of the SWMP planning period.

**Table 8.1
CBER Population Projections**

Population Projections	Est. Change, 2010 to 2015	Est. Change, 2015 to 2020	Est. Change, 2020 to 2025
Jefferson County (CBER)	+2.39%	+3.03%	+1.94%

According to the U.S. Census Bureau, the “covered area” of Jefferson County (does not include the City of Birmingham or Sylvan Springs) had a 2010 Census population of 469,444. Using the methodology described above, CBER estimates that the population of Jefferson County will increase an average of 0.048% per year between 2010 and 2015, an average of 0.061% per year between 2015 and 2020, and 0.039% for each year between 2020 and 2025. Applying these percentages to each of the covered municipalities in Jefferson 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. As discussed in Chapter 2, a portion of the City of Birmingham’s 2015 – 2025 population was included in the calculations for estimating future household, commercial and special waste solid waste quantities.

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
Jefferson County “Covered Area” Population Projections

JURISDICTION	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Adamsville	4,533	4,536	4,538	4,541	4,544	4,547	4,548	4,550	4,552	4,554	4,555
Bessemer	27,522	27,538	27,555	27,572	27,588	27,605	27,616	27,626	27,637	27,648	27,659
Brighton	2,952	2,954	2,956	2,957	2,959	2,961	2,962	2,963	2,964	2,966	2,967
Brookside	1,366	1,367	1,368	1,369	1,370	1,370	1,371	1,371	1,372	1,373	1,373
Cardiff	55	55	55	55	55	55	55	55	55	55	55
Center Point	16,972	16,982	16,992	17,002	17,013	17,023	17,030	17,036	17,043	17,049	17,056
Clay	9,731	9,737	9,743	9,749	9,755	9,761	9,764	9,768	9,772	9,776	9,780
Fairfield	11,144	11,150	11,157	11,164	11,171	11,177	11,182	11,186	11,190	11,195	11,199
Fultondale	8,400	8,405	8,410	8,415	8,420	8,425	8,429	8,432	8,435	8,439	8,442
Gardendale	13,926	13,935	13,943	13,952	13,960	13,968	13,974	13,979	13,985	13,990	13,996
Graysville	2,170	2,171	2,173	2,174	2,175	2,177	2,178	2,178	2,179	2,180	2,181
Homewood	25,227	25,243	25,258	25,273	25,288	25,304	25,313	25,323	25,333	25,343	25,353
Hoover	81,814	81,864	81,913	81,963	82,012	82,062	82,094	82,126	82,158	82,190	82,221
Hueytown	16,144	16,153	16,163	16,173	16,183	16,192	16,199	16,205	16,211	16,218	16,224
Irondale	12,379	12,386	12,394	12,401	12,409	12,416	12,421	12,426	12,430	12,435	12,440
Kimberly	2,717	2,719	2,721	2,722	2,724	2,726	2,727	2,728	2,729	2,730	2,731
Leeds	11,800	11,807	11,814	11,822	11,829	11,836	11,840	11,845	11,850	11,854	11,859
Lipscomb	2,215	2,217	2,218	2,219	2,221	2,222	2,223	2,224	2,225	2,225	2,226
Maytown	386	386	386	387	387	387	387	387	388	388	388
Midfield	5,378	5,381	5,384	5,388	5,391	5,394	5,396	5,398	5,400	5,403	5,405
Morris	1,863	1,865	1,866	1,867	1,868	1,869	1,870	1,871	1,871	1,872	1,873
Mountain Brook	20,462	20,474	20,487	20,499	20,511	20,524	20,532	20,540	20,548	20,556	20,564
Mulga	838	839	839	840	840	841	841	841	842	842	842
North Johns	145	145	146	146	146	146	146	146	146	146	146
Pinson	7,180	7,184	7,189	7,193	7,198	7,202	7,205	7,207	7,210	7,213	7,216
Pleasant Grove	10,134	10,140	10,146	10,153	10,159	10,165	10,169	10,173	10,177	10,181	10,185
Tarrant	6,412	6,416	6,420	6,424	6,428	6,432	6,434	6,437	6,439	6,442	6,444
Trafford	648	648	648	649	649	650	650	650	650	651	651
Trussville	19,977	19,989	20,001	20,013	20,025	20,037	20,045	20,053	20,061	20,068	20,076
Vestavia Hills	34,114	34,135	34,156	34,176	34,197	34,218	34,231	34,244	34,258	34,271	34,284
Warrior	3,184	3,186	3,187	3,189	3,191	3,193	3,194	3,196	3,197	3,198	3,199
West Jefferson	339	339	339	339	340	340	340	340	340	340	340
Unincorporated Jeff. Co.	108,441	108,506	108,572	108,636	108,701	108,768	108,810	108,856	108,896	108,936	108,982
Jefferson County “Covered Area” Total	470,568	470,852	471,137	471,422	471,707	471,993	472,176	472,360	472,543	472,727	472,912

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
JEFFERSON COUNTY HOUSEHOLD SOLID WASTE PROJECTIONS BY JURISDICTION**

JURISDICTION	WASTE GENERATION RATE	HOUSEHOLD WASTE GENERATED (TONS/YEAR)										
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Adamsville	2.47 LBS/CAP/DAY (Calculated in Chapter 2)	2,043	2,045	2,046	2,047	2,048	2,050	2,050	2,051	2,052	2,053	2,053
Bessemer		12,406	12,413	12,421	12,429	12,436	12,444	12,449	12,453	12,458	12,463	12,468
Birmingham – Apts.		3,841	3,843	3,846	3,848	3,850	3,852	3,854	3,855	3,857	3,858	3,860
Brighton		1,331	1,332	1,332	1,333	1,334	1,335	1,335	1,336	1,336	1,337	1,337
Brookside		616	616	617	617	618	618	618	618	618	619	619
Cardiff		25	25	25	25	25	25	25	25	25	25	25
Center Point		7,651	7,655	7,660	7,664	7,669	7,674	7,677	7,679	7,683	7,685	7,688
Clay		4,386	4,389	4,392	4,395	4,397	4,400	4,401	4,403	4,405	4,407	4,409
Fairfield		5,023	5,026	5,029	5,032	5,036	5,038	5,041	5,042	5,044	5,046	5,048
Fultondale		3,787	3,789	3,791	3,793	3,796	3,798	3,800	3,801	3,802	3,804	3,805
Gardendale		6,277	6,282	6,285	6,289	6,293	6,296	6,299	6,301	6,304	6,306	6,309
Graysville		978	979	980	980	980	981	982	982	982	983	983
Homewood		11,372	11,379	11,386	11,392	11,399	11,406	11,410	11,415	11,419	11,424	11,428
Hoover		36,880	36,902	36,924	36,947	36,969	36,991	37,006	37,020	37,035	37,049	37,063
Hueytown		7,277	7,281	7,286	7,290	7,295	7,299	7,302	7,305	7,308	7,311	7,313
Irondale		5,580	5,583	5,587	5,590	5,594	5,597	5,599	5,601	5,603	5,605	5,608
Kimberly		1,225	1,226	1,227	1,227	1,228	1,229	1,229	1,230	1,230	1,231	1,231
Leeds		5,319	5,322	5,325	5,329	5,332	5,335	5,337	5,339	5,342	5,343	5,346
Lipscomb		998	999	1,000	1,000	1,001	1,002	1,002	1,003	1,003	1,003	1,003
Maytown		174	174	174	174	174	174	174	174	175	175	175
Midfield		2,424	2,426	2,427	2,429	2,430	2,431	2,432	2,433	2,434	2,436	2,436
Morris		840	841	841	842	842	842	843	843	843	844	844
Mountain Brook		9,224	9,229	9,235	9,240	9,246	9,252	9,255	9,259	9,263	9,266	9,270
Mulga		378	378	378	379	379	379	379	379	380	380	380
North Johns		65	65	66	66	66	66	66	66	66	66	66
Pinson		3,237	3,238	3,241	3,242	3,245	3,246	3,248	3,249	3,250	3,251	3,253
Pleasant Grove		4,568	4,571	4,574	4,577	4,579	4,582	4,584	4,586	4,588	4,589	4,591
Tarrant		2,890	2,892	2,894	2,896	2,898	2,899	2,900	2,902	2,903	2,904	2,905
Trafford		292	292	292	293	293	293	293	293	293	293	293
Trussville		9,005	9,011	9,016	9,021	9,027	9,032	9,036	9,039	9,043	9,046	9,050
Vestavia Hills	15,378	15,387	15,397	15,406	15,415	15,425	15,430	15,436	15,443	15,449	15,454	
Warrior	1,435	1,436	1,437	1,438	1,438	1,439	1,440	1,441	1,441	1,442	1,442	
West Jefferson	153	153	153	153	153	153	153	153	153	153	153	
Unincorp. Jeff. Co.	48,882	48,912	48,942	48,970	49,000	49,030	49,049	49,070	49,088	49,106	49,126	
Jefferson County “Covered Area” Totals:		215,960	216,091	216,226	216,353	216,485	216,613	216,698	216,782	216,869	216,952	217,034

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

JURISDICTION	WASTE GENERATION RATE	COMMERCIAL WASTE GENERATED (TONS/YEAR)										
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Adamsville	2.62 LBS/CAP/DAY (Calculated in Chapter 2)	2,167	2,169	2,170	2,171	2,173	2,174	2,175	2,176	2,177	2,177	2,178
Bessemer		13,160	13,167	13,175	13,184	13,191	13,199	13,205	13,209	13,215	13,220	13,225
Birmingham (98%)		98,928	98,988	99,048	99,108	99,168	99,228	99,266	99,305	99,343	99,382	99,420
Brighton		1,411	1,412	1,413	1,414	1,415	1,416	1,416	1,417	1,417	1,418	1,419
Brookside		653	654	654	655	655	655	656	656	656	656	656
Cardiff		26	26	26	26	26	26	26	26	26	26	26
Center Point		8,115	8,120	8,125	8,130	8,135	8,140	8,143	8,146	8,149	8,152	8,155
Clay		4,653	4,656	4,659	4,661	4,664	4,667	4,669	4,671	4,672	4,674	4,676
Fairfield		5,329	5,331	5,335	5,338	5,341	5,344	5,347	5,349	5,350	5,353	5,355
Fultondale		4,016	4,019	4,021	4,024	4,026	4,028	4,030	4,032	4,033	4,035	4,037
Gardendale		6,659	6,663	6,667	6,671	6,675	6,679	6,682	6,684	6,687	6,689	6,692
Graysville		1,038	1,038	1,039	1,039	1,040	1,041	1,041	1,041	1,042	1,042	1,043
Homewood		12,062	12,070	12,077	12,084	12,091	12,099	12,103	12,108	12,113	12,118	12,123
Hoover		39,119	39,143	39,167	39,191	39,214	39,238	39,253	39,269	39,284	39,299	39,314
Hueytown		7,719	7,724	7,728	7,733	7,738	7,742	7,746	7,748	7,751	7,755	7,758
Irondale		5,919	5,922	5,926	5,930	5,933	5,937	5,939	5,941	5,943	5,946	5,948
Kimberly		1,299	1,300	1,301	1,302	1,302	1,303	1,304	1,304	1,305	1,305	1,306
Leeds		5,642	5,646	5,649	5,653	5,656	5,659	5,661	5,664	5,666	5,668	5,670
Lipscomb		1,059	1,060	1,061	1,061	1,062	1,062	1,063	1,063	1,064	1,064	1,064
Maytown		185	185	185	185	185	185	185	185	186	186	186
Midfield		2,571	2,573	2,574	2,576	2,578	2,579	2,580	2,581	2,582	2,583	2,584
Morris		891	892	892	893	893	894	894	895	895	895	896
Mountain Brook		9,784	9,790	9,796	9,802	9,807	9,814	9,817	9,821	9,825	9,829	9,833
Mulga		401	401	401	402	402	402	402	402	403	403	403
North Johns		69	69	70	70	70	70	70	70	70	70	70
Pinson		3,433	3,435	3,437	3,439	3,442	3,444	3,445	3,446	3,447	3,449	3,450
Pleasant Grove		4,846	4,848	4,851	4,855	4,858	4,860	4,862	4,864	4,866	4,868	4,870
Tarrant		3,066	3,068	3,070	3,072	3,074	3,075	3,076	3,078	3,079	3,080	3,081
Trafford		310	310	310	310	310	311	311	311	311	311	311
Trussville		9,552	9,558	9,563	9,569	9,575	9,581	9,585	9,588	9,592	9,596	9,599
Vestavia Hills	16,312	16,322	16,332	16,341	16,351	16,361	16,368	16,374	16,380	16,387	16,393	
Warrior	1,522	1,523	1,524	1,525	1,526	1,527	1,527	1,528	1,529	1,529	1,530	
West Jefferson	162	162	162	162	163	163	163	163	163	163	163	
Unincorp. Jeff. Co.	51,851	51,882	51,914	51,944	51,975	52,007	52,028	52,049	52,069	52,088	52,110	
Jefferson County "Covered Area" Totals:		323,929	324,126	324,322	324,520	324,714	324,910	325,038	325,164	325,290	325,416	325,544

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

JURISDICTION	WASTE GENERATION RATE (LBS/CAP/DAY)	CONSTRUCTION / DEMOLITION WASTE GENERATED (TONS/YEAR)										
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Jefferson County "Covered Area" Total	1.66	142,559	142,645	142,731	142,817	142,904	142,990	143,046	143,101	143,157	143,213	143,269

Note: Waste generation rates were derived in Chapter 2.

**TABLE 8-6
JEFFERSON COUNTY INDUSTRIAL SOLID WASTE PROJECTIONS BY JURISDICTION**

JURISDICTION	WASTE GENERATION RATE (LBS/CAP/DAY)	INDUSTRIAL WASTE GENERATED (TONS/YEAR)										
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Jefferson County "Covered Area" Total	1.04	89,314	89,368	89,422	89,476	89,530	89,584	89,619	89,654	89,689	89,724	89,759

Note: Waste generation rates were derived in Chapter 2.

**TABLE 8-7
JEFFERSON COUNTY SPECIAL WASTE PROJECTIONS BY JURISDICTION**

JURISDICTION	WASTE GENERATION RATE (LBS/CAP/DAY)	SPECIAL WASTE GENERATED (TONS/YEAR)										
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Jefferson County Total, Including Birmingham	0.93	115,699	115,769	115,840	115,909	115,980	116,050	116,095	116,140	116,185	116,230	116,276

Note: Waste generation rates were derived in Chapter 2.

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. Under the current volume estimation method, 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 household 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 likely 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 in comparison to the tonnages of municipal solid waste received at these landfills. The landfills that do receive a larger percentage of Special Waste as compared to the total waste received tend to plan and prepare for those larger quantities. Therefore, changes in future amounts of special waste are not expected to significantly affect the total amounts or management of special waste generated in Jefferson County in the future.

CHAPTER 9

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 Jefferson County (see Chapter 4). According to survey results, several landfills report having more than 50 years of disposal capacity remaining at their facilities; a couple landfills even reported having more than 200 years of disposal capacity remaining. Although there currently appears to be adequate solid waste disposal capacity available to Jefferson County and its municipalities for the duration of the planning period for this SWMP, a jurisdiction within the County may decide it would be advantageous to site a landfill or processing facility in Jefferson 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 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 an area to guide its future growth and achieve a logical pattern of land use and development for the county. 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. 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.

If a jurisdiction has zoning regulations in place, then any proposed solid waste transfer stations, disposal facilities or processing facilities shall be located in areas that are appropriately zoned for each type of facility.

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
- Air pollutant limitations
- Daily cover of solid waste

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 OR EXPANDED SOLID WASTE FACILITIES

The Jefferson County Commission shall consider approval of proposed new or expanded solid waste facilities or services in unincorporated Jefferson County. A municipal government which is subject to and covered by the County's SWMP may consider and grant local approval of new or expanded solid waste management facilities and services within their municipal limits only. Proposed facilities to be located within a municipality's limits will only be considered by the County Commission after the Commission is petitioned by the City or Town Council to approve said facility/site and an appropriate review fee is negotiated (unless the fee is waived).

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.

CHAPTER 10

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

Both of the MSW Landfills owned by the Jefferson County Commission (Jefferson County Landfill No. 1 and No. 2) are currently being leased to Santek Environmental of Alabama, LLC. Santek operates and manages both facilities for the disposal of municipal solid waste, construction/demolition solid waste, approved inert industrial waste and approved special waste.

10.2 EVALUATION OF NEED FOR FUTURE JOINT USE AGREEMENTS

The current lease term extends until completion of the operational lives of the subject landfills; therefore, it is anticipated that Jefferson County will continue leasing both landfills to Santek Environmental for the duration of the current SWMP planning period.

None of the other local governments 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.

CHAPTER 11

PRIVATE COLLECTION, PROCESSING 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

11.1.1 Jefferson County

In 2013, the Jefferson County Commission had “Franchise Agreements” with three (3) solid waste collection agencies to provide residential solid waste collection and transportation services in specific areas of unincorporated Jefferson County. These collection agencies also served a few of the very small municipalities in the rural parts of the county. Jefferson County is currently changing its Franchise Program so that only one collection agency will collect and transport solid waste that is generated in the unincorporated and rural areas. This single-provider contract is anticipated to bid in 2015.

In addition, as mentioned in Chapter 10, Jefferson County currently has a contractual agreement with Santek Environmental of Alabama, LLC for the disposal of solid waste that is delivered to either of the two County-owned landfills.

11.1.2 Municipalities

In 2013, many of the 32 participating municipalities contracted their residential (or residential and commercial) solid waste collection services to private collection agencies. See Chapter 3 for more detailed information on which municipalities had contractual agreements with private entities for the collection, processing or disposal of solid waste generated in their jurisdiction.

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

Since Jefferson County and those municipalities mentioned above and in Chapter 3 either do not, or no longer provide solid waste collection and disposal services, it is anticipated that contractual agreements with private entities will continue to be needed for the collection, processing or disposal of solid waste generated in their jurisdictions. In many cases, it is more economical and practical for these services to be contracted to a private entity than it is for each municipality to maintain the personnel and equipment to provide solid waste collection services themselves.

CHAPTER 12
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 Jefferson 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. The expansion of an existing facility would best occur on site or adjacent to that site, if possible.

12.3 CURRENTLY PROPOSED SOLID WASTE PROCESSING/DISPOSAL OR RECYCLING FACILITIES

There are no known new solid waste processing/disposal or recycling facilities planned for Jefferson 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 Jefferson County, or make modifications to existing facilities, shall remain available to Jefferson County and its municipalities.

CHAPTER 13

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

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 or by contract, and is usually based on ownership, location, tipping fees, and ease of transportation to the facility.

In addition, many municipalities do not generate the quantities of solid waste that are needed for the economical operation of full-scale Subtitle D solid waste disposal facilities. Therefore, it is currently more economical for the solid waste generated in these areas to be taken to other facilities outside the jurisdiction for disposal.

Some MSW landfills are also 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 can accept these tires. It is the contractor's choice as to which location he takes the tires to for proper disposal. Again, this is typically based on ownership, location, tipping fees, and ease of transportation to the facility.

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 2012.
- (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, 2012.

APPENDIX “A”

APPLICATION FOR HOST GOVERNMENT
APPROVAL

**HOST GOVERNMENT APPLICATION
FOR
PROPOSED SOLID WASTE FACILITY IN JEFFERSON COUNTY**

This application is to be filled out and submitted to the host government (typically the County Manager or Mayor) 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.

Please note that current ADEM regulations call for specific advertising and review timeframes described below. If these regulations are amended in the future, or the timeframes are changed by Alabama Law, the then-current timeframes and procedures will apply and shall supersede those listed below.

- 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).
- 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, or the timeframe required if amended in the future by Alabama Law or ADEM Regulations.
- 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.
- H. All Technical aspects of the Host Government Application must be certified by a registered professional (i.e. Professional Engineer or Geologist), as applicable.

DATE OF APPLICATION SUBMITTAL: _____

1. PROPOSED NAME OF FACILITY: _____

2. APPLICANT:

Name _____

Address _____

Telephone _____

If applicant is a Corporation, list Officers: _____

If applicant is a Partnership, list principals:

Principal Stockholders: _____

3. PROPOSED FACILITY TYPE:

_____ MSW LANDFILL

_____ C & D LANDFILL

_____ INDUSTRIAL LANDFILL

_____ PROCESSING FACILITY (Describe)

_____ OTHER (Explain)

3. CONTACT PERSON(S): (if different from No. 2)

Name (1) _____ (2) _____

Address _____

Telephone _____

4. LANDOWNER: (if different from No. 2)

Attach a copy of the agreement from landowner giving permission to use site for the intended purpose.

Name _____

Address _____

Telephone _____

5. SITE DESCRIPTION:

a. Location: Township _____ Range _____

Section _____ $\frac{1}{4}$ Section(s) _____

b. Attach location map with the site clearly identified. Acceptable maps include a USGS 7.5 or 15 minute series, a county highway map published by the State DOT, or approved equivalent.

c. Attach a legal property description and boundary plat of the proposed facility prepared by a land surveyor.

d. Size of disposal facility (actual area to be utilized) _____ acres.

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?

YES _____ NO _____

Provide a current flood insurance rate map with the site identified.

- b. Is the facility located so as to protect surface water and groundwater?

YES _____ NO _____

Explain on an attached sheet.

- c. Is a discharge to surface water proposed that may require an NPDES Permit?

YES _____ NO _____

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?

YES _____ NO _____

- e. The bottom elevation of solid waste shall be a minimum of five feet above the seasonal 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?

YES _____ NO _____

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.

9. GENERAL:

a. 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.

- 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.

CERTIFICATION:

I, _____, certify under penalty of law that this document and all attachments submitted are to the best of my knowledge and belief, true, accurate, and complete.

SIGNATURE : _____
(Signature of Corporate Officer, Partner, Mayor, Chairman, etc.)

(Printed Name and Title)

SIGNATURE : _____
(Signature of Registered Professional)

(Printed Name and Title)

(Professional Seal)

APPENDIX “B”

PUBLIC NOTICE and COMMENTS

B-1: JEFFERSON COUNTY 2015 SWMP

PUBLIC HEARING – GENERAL

B-2: NOTICE OF PUBLIC HEARING

B-3: PUBLIC HEARING SIGN-IN SHEET

B-1: JEFFERSON COUNTY SWMP PUBLIC HEARING - GENERAL

A public hearing regarding the *Jefferson County Solid Waste Management Plan, 2015* (SWMP or Plan) was held on **Tuesday, _____, 2015** to hear public comment on the Draft version of the County's Plan. This public hearing was held in the **Jefferson County Commission Chambers** in the Jefferson **County Courthouse**. A notice announcing the public hearing was published in a local paper (**the _____**) at least thirty (30) days prior to the hearing and a copy of the SWMP was made available to the public by the Jefferson County Commission from **_____, 2015 to _____, 2015**.

(Insert Public comments received, if any).

B-2: NOTICE OF PUBLIC HEARING

B-3: PUBLIC HEARING SIGN-IN SHEET

APPENDIX “C”

C-1: PUBLIC HEARING MINUTES

C-2: RESOLUTION ADOPTING THE 2015
SOLID WASTE MANAGEMENT PLAN

C-1: PUBLIC HEARING MINUTES

**C-2: RESOLUTION ADOPTING THE 2015
SOLID WASTE MANAGEMENT PLAN**

APPENDIX “D”

ADEM APPROVAL LETTER