SOLID WASTE MANAGEMENT PLAN FOR

SUMTER COUNTY, ALABAMA

October 2014



Prepared for Sumter County Commission

Prepared by

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I. INTRODUCTION

A Solid Waste Management Plan (SWMP) is required of local governments by the Alabama Department of Environmental Management (ADEM) to plan for the collection and disposal of solid waste generated within its boundaries. A SWMP was last developed for Sumter County in 2005, which addressed the solid waste needs for Sumter County until 2015. This plan will serve as an update to the 2005 plan by analyzing the previous recommendations and providing suggested alternatives to serve the solid waste needs of Sumter County.

The goal of this Solid Waste Management Plan is to aid Sumter County, its municipalities, and ADEM in providing for the collection and disposal of solid waste generated within the county. The plan is meant to provide an overview of current waste volumes and characteristics, as well as to project the future solid waste needs of the county. In addition, the plan is intended to offer alternatives and recommendations for the County to more efficiently and economically meet their solid waste needs. Section X of this plan will offer recommended actions for Sumter County to take to meet the needs set forth in this plan. The plan will serve Sumter County for a 10-year period from 2015 to 2025. As required by Alabama Law, the Sumter County Commission will pass a resolution to accept this plan. This updated Plan will expire ten (10) years from the approval date of the Resolution included in Appendix E.

A Solid Waste Needs Assessment was prepared by the Alabama Tombigbee Regional Commission (ATRC), which includes all of Sumter County. The last assessment, performed in 2003, was used as a guideline in preparing the Sumter County SWMP. The assessment used population and waste projections to determine the future solid waste needs of Sumter County and the region. Upon its completion and approval, a copy of this report will be made available to the ATRC for their use in future needs assessments.

Sumter County is located in west Alabama along the Mississippi border. It is bounded by Pickens County to the north, Green County to the east, Marengo County to the southeast, Choctaw County to the south, and the state of Mississippi to the west. Sumter County is composed of seven (7) municipalities and one (1) county government. Municipalities include the cities of Livingston and York and towns of Cuba, Emelle, Epes, Gainesville, and Geiger. The county is in a sparsely populated, rural area.

According to the 2010 US Census, the population of Sumter County is 13,763 people. This is an approximately 7.0% decrease from the 2000 US Census figure of 14,798 people. Of the 2010 figure, approximately 49%, or 6,771 people, live outside of the seven municipalities. Populations of the seven (7) municipalities are:

- 1. City of Livingston: 3,485
- 2. City of York: 2,538
- 3. Town of Cuba: 346
- 4. Town of Gainesville: 208
- 5. Town of Epes: 192
- 6. Town of Geiger: 170
- 7. Town of Emelle: 53

A detailed list of current population data as well as population projections is shown below **(Figure I-1)**.

A	Census Data			Projected Population		
Area	1990	2000	2010	2015	2020	2025
Sumter County	16,174	14,798	13,763	13,323	12,944	12,584
Livingston	3,530	3,297	3,485	3,374	3,278	3,186
York	3,160	2,854	2,538	2,457	2,387	2,321
Cuba	390	363	346	335	325	316
Gainesville	449	220	208	201	196	190
Epes	267	206	192	186	181	176
Geiger	270	161	170	165	160	155
Emelle	44	31	53	51	50	48
Catagory	Exi	sting Popula	tion	Pro	jected Popul	ation
Category	1990	2000	2010	2015	2020	2025
Urban	8,110	7,132	6,992	6,768	6,576	6,393
Rural	8,064	7,666	6,771	6,555	6,368	6,191
Total	16,174	14,798	13,763	13,323	12,944	12,584

Figure I-1
Sumter County Current and Projected Populations

Sources:

U.S. Census Bureau, 2010 Data

University of Alabama Center for Business and Economic Research, 2011

Municipality Projected Population Estimated as Percentage of Future County Population based on

municipality's 2010 percentage of overall County population

The major industry in the county is manufacturing which employs approximately 23% of the work force and educational, health and social services, which employs approximately 22% of the available work force. Major manufacturing and educational, health and social service industries in the county include University of West Alabama, Sumter County School System, Mannington Wood Floor, Prystup Packaging Products LLC, Sumter Health and Rehab Center LLC, Chemical Waste Management, Big River Industries, Hill Hospital of Sumter County, Livingston Box, and Southwest Paper.

As has been the case with many rural counties in Alabama, Sumter County has experienced an economic downturn over the past 25 years. The unemployment rate has continued to rise and is well above the national average. Many residents of Sumter County are forced to commute outside the county to find employment. This has also contributed to the population decline the county has faced.

II. WASTE VOLUME AND COMPOSITIONS

Municipal solid waste consists of the solid material discarded by a community including excess food, containers and packaging, residential garden wastes, other household discards and light industrial debris. These materials are generally disposed of by the community in a permitted landfill. Hazardous wastes including paints, oils, and radioactive substances present special disposal problems and are not included in municipal solid waste. Municipal solid waste is generated by a community at an average of 5 to 8 lbs per person per day. According to the United States Environmental Protection Agency, the US generated approximately 4.40 lbs per day of municipal solid waste in 2011 and 4.38 lbs per day in 2012. A value of 5 lbs per person per day is commonly used for design purposes in developing solid waste plans. This number can vary greatly in an area based on illegal dumping, recycling programs, an area's average income, and the number and type of jobs within the community. Given Sumter County's existing population of 13,763, the expected waste to be generated from the county would be 12,560 tons per year; however, recent data shows the total waste at approximately 6,114 tons per year.

Table II-1 gives the average composition of solid wastes generated in the United States.

Component	Percentage by Weight
Paper, Cardboard	27.4
Yard Waste	13.5
Food Waste	14.5
Metal	8.9
Glass	4.6
Plastics	12.7
Wood	6.3
Rubber, Leather, Textiles	8.7
Other (Ceramic, Stone, Dirt)	3.4
Total	100%

Table II-1 Composition of Municipal Solid Waste, 2012

A key to evaluating the solid waste management needs for Sumter County is to determine the amount of existing and future wastes volumes to be generated. In addition, the composition of that waste generated must be taken into account. This data can be useful in making determinations as to the required landfill capacity and alternatives for collection and disposal. The composition of the waste will aid in determining the amount of potential recyclables as well as waste that could be disposed of in a Construction and Demolition (C & D) landfill instead of a Municipal Solid Waste (MSW) landfill.

Sumter County Commission provides solid waste collection to all residences for the following areas: Emelle, Epes, Gainesville, Geiger, and rural Sumter County. These areas will be referred to for the rest of the report as rural Sumter County. The City of Livingston, the City of York, and the Town of Cuba provide solid waste collection for each residence in their respective municipalities. The residences are processed a fee through their utility bills on a monthly basis. The City of Livingston also collects large items such as tree limbs, bags of leaves, and household appliances. Residential waste is taken from the municipalities and rural Sumter County to the Pine Ridge Sanitary Landfill. Pine Ridge Sanitary Landfill is owned and operated by Waste Management. The Sumter County Commission collects all commercial and industrial solid waste for the following areas: Emelle, Epes, Gainesville, and Geiger. These areas will be considered rural for the remainder of the report. The frequency of collection varies according to the account the commercial customer(s) obtains. Typically, commercial waste is collected one (1) to three (3) times a week, with the fees being assessed to the customers' utility bills. The amount of industrial and construction demolition wastes can vary greatly from one area to another. These waste are directly affected by the number and type of large industries and the amount of growth and construction an area is experiencing. Waste that is transported to construction and demolition (C&D) landfills is usually collected and transported by a private homeowner, municipality, or a contract hauler. There are no C&D landfills in Sumter County where citizens can dispose of C&D waste.

Recycling eliminates a portion of a community's total solid waste. Livingston has an established recycling program. Plastics, newspapers, cardboard, and ferrous metals are accepted from residents. The recycling program was established at the time this Plan was written; therefore any waste volumes recycled at the recycling center are not included in this report. With the addition of this recycling program, illegal dumping can be expected to decrease. Illegal dump sites are discussed in further detail in Section V of this report.

Table II-2 gives a breakdown of the average annual waste collected in Sumter County.

Table II-2	
Sumter County 2013 Waste Totals	

Source of Waste	Tons of Waste
Rural Sumter County Residential	2,145.39
City of Livingston Residential/Commercial	2,118
City of York Residential/Industrial	1,745.9
Town of Cuba Residential	105
Total	6114.29

The Solid Waste Management Plan must address the solid waste needs of Sumter County for the next 10 years. In order to accomplish this, projections must be made of the waste to be generated in that time period. Using the projected population trends and past increases in solid waste generation, estimates can be made. According to data from the 2005 plan, Sumter County generated an average of 10,900 tons of solid waste in 2004. In 2013, the total waste was significantly decreased to 6,110 tons.

Table II-3 gives a breakdown of population and solid waste projections for Sumter County for the next 10 years. The population figures for 2015, 2020, and 2025 were obtained from the University of Alabama Center for Business and Economic Research. Population projections for intermediate years were interpolated by the author. All solid waste projections were based on percentage increases in population. It should be noted that population data is generally not a reliable measure for future waste projections, but considering there are no long range economic projections available from the Regional Planning Commission, population will be the only variable used in predicting future solid waste projections.

Year	Population	Solid Waste Projections
	Projections	(Tons)
2013	13,499	6114.3
2014	13,411	6074.4
2015	13,323	6034.6
2016	13,247	6000.2
2017	13,171	5965.9
2018	13,096	5931.6
2019	13,020	5897.2
2020	12,944	5862.9
2021	12,872	5830.3
2022	12,800	5797.7
2023	12,728	5765.1
2024	12,656	5732.5
2025	12,584	5699.8

Population and Solid Waste Projections

Table II-3

III. EXISTING COLLECTION METHODS

Records of waste volume and compositions were obtained from Sumter County Commission for a period consisting of the past 12 months. Sumter County collects solid waste from the following areas: Emelle, Epes, Gainesville, Geiger, and rural Sumter County. Solid waste is collected on a weekly basis from 2,800 residences in Sumter County. The total solid waste collected by the Sumter County Commission for the past 12 months was 2,145.39 tons. Fees are assessed to each resident at \$15 a month.

The City of Livingston collects its residential waste three (3) times a week from 1,012 residents. Fee for this collection service are assessed at a rate of \$26 a month. Participation is mandatory for all residents. The City of Livingston is also responsible for collecting all of their commercial and industrial waste. Collection of solid waste in Livingston takes place once a week, with the fees being assessed monthly on the customers' utility bills. Currently there is not a standard method for billing commercial waste. The average cost for commercial collection is \$220 a month. During the past 12 month period, the city collected a total of 2,118 commercial, industrial, and residential tons.

The City of York is responsible for the collection of its residential waste on a weekly basis from 926 residents. Fee for this collection service are assessed to the customers through utility billing at an average cost of \$16 per household. During the past 12 month period, the city collected a total of 1003.4 tons of residential waste.

The City of York is responsible for collecting all of their commercial and industrial waste. Collection of solid waste in York takes place three times a week, with the fees being assessed monthly ranging from \$20 to \$600, depending on the size of the dumpster. During the past 12 month period, the city collected a total of 742.4 tons of commercial waste.

The Town of Cuba collects their residential waste within the municipality. It is collects on a weekly basis at a rate of \$5 per month charged to each resident. During the past 12 months, the town collected approximately 105 tons of residential waste from 150 residents.

All residential and commercial waste is taken from the municipalities to the Pine Ridge Sanitary Landfill in Meridian, MS. Pine Ridge Sanitary Landfill is owned and operated by Waste Management, Inc.

All other solid waste is transported to the nearest C&D landfill by individuals personally. Collection of these wastes is the responsibility of the individual or private company and is not provided by the County or local municipalities. All waste disposed of at this site must be brought to the landfill by the individual or business. Depending upon the amount of waste being transported, the waste is usually hauled to the landfill in privately owned vehicles, trailers or large dump trucks. Disposal of solid waste is not permitted by the County other than at the locations listed above.

IV. EVALUATION OF DISPOSAL FACILITIES

Municipal solid waste is generally disposed in a permitted landfill facility. All newly constructed municipal solid waste landfills require liners, which prevent the leachate from the waste from contaminating adjacent soil and groundwater. Leachates are liquid wastes from a landfill containing dissolved and suspended solid matter. Waste is placed in layers, typically 2 to 3 ft. thick, and is compacted before soil is added as a cover. A landfill is typically evaluated according to its remaining capacity. Municipal Solid waste generated in Sumter County is currently disposed of in the Pine Ridge Sanitary Landfill.

Pine Ridge Sanitary Landfill is located in Meridian, Mississippi in Lauderdale County. The landfill is owned and operated by Waste Management, Inc. Pine Ridge Sanitary Landfill is currently permitted until August 31, 2022 by the Mississippi Department of Environmental Quality. The original landfill, opened in December of 1989, encompassed a ±68 acres of permitted acres and ±150 total acres. Since opening, approximately ±7 acres have been bought and added to the total permittable acreage for the landfill. The landfill is roughly half full with the expected lifespan to be ±30 years. The Sumter County Commission, the City of Livingston, and the City of York use the landfill for the solid waste from their proposed municipalities in Sumter County as well as other communities it serves in the general area.

V. ELIMINATION OF DUMPS

Illegal dumping creates environmental and health hazards and must be addressed as a part of this report. Despite the efforts of Sumter County and the municipalities, illegal dumping continues to be a problem. Illegal dumping occurs throughout the county both on public right of way and on private property. The disposed waste can pollute streams and rivers and affect the quality of groundwater. Participation in the solid waste collection system is mandatory of all residents of Sumter County.

One of the objectives of this Solid Waste Management Plan is to address illegal dumping in Sumter County and offer suggestions for their elimination. Currently, there are 27 illegal dump sites throughout the county. The county sanitation department, along with ADEM, are working with the landowners in getting each and every site cleaned up. A visual inspection was made by the county of the illegal dump sites and any previous ones found. A map of the sites can be found in Appendix A.

Participation in a solid waste collection program is mandatory for all residents by Act of the State of Alabama Legislature. Since the 1990 report, Sumter County has contracted for house-to-house collection of solid waste at all residences within the county. All dump sites which were previously located throughout the county have been cleaned up. These changes have dramatically reduced the amount of illegal dumping due to the convenience it has created for the public.

A key to the elimination of illegal dumps throughout the county is public education. The public must be made aware of the adverse effects the waste will have on their surrounding environment. One method that can be used to educate the public of the environmental consequences of illegal dumping is through the Sumter County School System. Local officials can make presentations and students can be encouraged by teachers and school officials to take the necessary steps to protect the environment for the future. Other methods for public education can include signs throughout the county encouraging residents not to litter and organized clean-ups of dump sites in the county.

A second key is to provide all residences with house-to-house waste pick-up at affordable rates. Some residents who are forced to pay high fees for collection and have to go out of their way to have the waste collected will often seek alternative ways to dispose of the waste such as illegal dumping or burning. Sumter County has accomplished this providing house-to-house pick up of solid waste. Sumter County must work to ensure these services continue and that fees residents are required to pay do not see dramatic increases.

It is recommended that Sumter County continue its efforts throughout the ten-year period of this plan to eliminate all illegal dumps within the county. Providing enough manpower to adequately monitor all sites with law enforcement would be virtually impossible. All law enforcement throughout the county, however, should be made aware of the location of these dumps and encouraged to periodically monitor them. Citizens of Sumter County, especially those living and owning property near the sites, should also be encouraged to monitor the sites and report any illegal dumping to appropriate authorities. The county should also consider implementing increased fines punishment for illegal dumping as a way to deter the activity.

VI. SOLID WASTE AGGREMENTS AND AUTHORITIES

The Sumter County Solid Waste Department is directed by the Sumter County Commission. Municipalities within the county include the City of Livingston, City of York, Town of Cuba, Town of Epes, Town of Emelle, Town of Gainesville, and the Town of Geiger. The City of Livingston, the City of York, and the Town of Cuba each provide house-to-house collection within their municipalities. The Sumter County Commission provides house-to-house collection for the rest of the municipalities, including rural Sumter County. The Sumter County Commission has agreements with industries for waste collection with the Epes, Emelle, Gainesville, and Geiger municipalities. The City of Livingston and City of York have their own agreements with the industries within the city limits of each municipality. The Town of Cuba does not collect industrial waste, but will rent out the vehicle at a fee paid by the customer and the customer has to pay the tipping fee at Pine Ridge as well.

VII. RECYCLING

Recycling is an important step in developing an effective solid waste management plan for a community. Recycling programs can eliminate 25% to 50% of the waste generated by a community. Programs can consist of collection or materials for reuse, as well as composting of yard wastes. It is estimated that approximately 20% of the solid waste from a community is made up of yard wastes. Currently, only the City of Livingston collects yard waste from residents within the county twice a week and collect items such as tree limbs, leaves, and household appliances. Other recyclable wastes including plastics, paper and cardboard must be collected and transported individually to a facility capable of recycling the materials.

Recycling can be accomplished both at the source and at the point of disposal. Collection programs can be established to pick up recyclables at each residence, business and institution with the resident having the responsibility to separate the items from other waste. Recycling centers can also be set up at one or more locations in the county, at which recyclable wastes can be brought. In addition, recycling containers can be set up at all transfer stations and landfills to allow customers bringing wastes to these locations to participate in the program.

In addition to providing collection services, educational tools can be utilized to promote recycling activities. Local schools can be used to educate children on the importance of recycling for the protection of the environment. The recycling director for the county can visit each school within the county to educate the students on the importance of recycling and protecting the environment for the future. Public education methods can also be utilized by the county and local municipalities.

Livingston established a recycling program October 2014. Residents are allowed to bring plastics, newspaper, cardboard, and ferrous metals. All materials except ferrous metal will be baled and put into containers. Ferrous metals will be placed directly in containers. All containers will be sent to the Tuscaloosa Recycling Center for end markets use. The Livingston facility will be located at 100 Bennett Road, Livingston, Alabama 35470.

As noted in the 2005 Plan, Alabama Act 89-824 mandated that each county must develop a recycling plan to reduce waste volume by 25%. Although a schedule for meeting the mandate was proposed, the county as a whole has not reached the goal. In order to meet the 25% goal, Sumter County must implement a county-wide plan and encourage participation by all local municipalities. The addition of the new Livingston Recycling Center described above will greatly help to achieve this goal. Alternative proposed plans of action for reaching this goal is described in Section VIII of this report.

VIII. PROPOSED ALTERNATIVES

In compiling a Solid Waste Management Plan for Sumter County, it is important to evaluate alternatives in order to ensure the county has the proper plans in place to adequately serve its resident's solid waste needs. Alternatives must be evaluated for solid waste collection, disposal, and recycling programs. An analysis must be made of the current system to determine any deficiencies and areas where the county can seek to improve. Several factors must be taken into account including the county's anticipated growth, their ability to meet current and future regulatory requirements, and their ability to provide quality service to the residents at affordable rates.

The first area that was analyzed was the collection of solid waste within the county. Currently, the Sumter County Commission collects all waste in the county except within the City of Livingston, the City of York, and the Town of Cuba. The City of Livingston, the City of York, and the Town of Cuba collect their solid waste within the respected municipalities. The Sumter County Commission charges its 2800 residents \$15 a month. The City of Livingston charges its 1156 residents \$26 a month, and the City of York charges its 926 residents \$16 a month. The Town of Cuba charges its 150 residents \$5 a month for collection services.

One alternative for collection of solid waste is to contract with a private company. The county and municipalities are in the process of soliciting bids from companies for the collection services of a county as a whole. An advantage to this alternate is that it puts the responsibility of operating the system including maintaining equipment and personnel on the private company. A disadvantage to this alternate is that it does not give the local governments control over the quality of service and costs to the residents.

A second alternative for the collection of solid waste is for the county and municipalities to continue to collect waste at all residences and businesses. This alternate has the advantage of giving control of the system to the county and local governments for cost and quality control. One disadvantage to this alternate is the required responsibility of operating the system including maintaining equipment and personnel. Another disadvantage is that this could cause the price per customer to be higher than that of a contract with a private company.

The second area that was analyzed was the disposal location of solid waste generated from the county. Currently, all municipal solid waste generated in Sumter County is disposed of in the Pine Ridge Sanitary Landfill in Meridian, Mississippi. The landfill is owned and operated by Waste Management. Although the residents of Sumter County are not directly charged a tipping fee for disposal of waste, the cost is factored in to the fees paid for collection. Because there are no C&D landfills in Sumter County, all construction and demolition wastes are disposed of individually by the customers.

One alternate is for solid waste disposal is for Sumter County to construct a regional landfill in cooperation with adjoining counties and municipalities. Several standards must be evaluated in order to determine if the county or surrounding region would benefit from constructing a landfill. These standards are discussed further in Section XI of this report. The existing and future solid waste management needs including planned developments must be evaluated. The new landfill must be sited based on proximity to major transportation arteries as well as proximity to major industries and municipalities that will generate large waste volumes. In addition, all environmental, social and economic impacts must be analyzed to determine the effect the landfill would have.

Without the participation of adjoining counties, it would not be economically feasible for Sumter County to construct and operate a landfill facility. Sumter County currently generates approximately 6115 tons per year of municipal solid waste. Projections show the county's waste decreasing to about 5,700 tons per year by the year 2025. Given these figures, it is currently more economical for Sumter County to contract with a private company for solid waste disposal. The possibility of a landfill facility

in Sumter County should be reevaluated if there is a dramatic increase in waste generated or if other counties express interest in participating in the project.

The third area that was analyzed was the recycling program for Sumter County. Currently, only the City of Livingston has an established recycling program. The Livingston Recycling Center was established in October 2014. The center accepts waste from residents, but does not pick up from residencies or businesses. The recycling program was established at the time this Plan was written; therefore any waste volumes recycled at the recycling center are not included in this report.

Sumter County and all municipalities within the county would benefit greatly from a strong recycling program. An increase in recycled solid waste would decrease the waste that is currently disposed of in landfills and could ultimately decrease collection and disposal costs. In addition, recycling provides numerous environmental advantages for the residents of Sumter County. Well established recycling programs can eliminate up to 50% of solid waste that would otherwise occupy landfill space.

One alternate for Sumter County is to establish a county-wide recycling program. The county would hire a recycling director and staff to collect, separate and transport the material to the appropriate recycling centers. The county would purchase portable containers to be placed throughout the county for use by all residents. In addition, a building would be needed to provide a central location for handling of all recyclable materials.

In preliminary planning for a county-wide recycling plan, a general location for processing must be determined. Since a large part of the county's population is located within the cities of Livingston, and York, and these areas are centrally located within the county, it would make sense to locate the facility in this general area. Livingston has established a recycling program that could be expanded to meet the recycling needs of the county. Analysis of the effectiveness of the current center can be used to evaluate if there is a need for an expansion. In addition to these factors, Sumter County must also consider the public safety, public health, social, and economic impacts the facility will have.

The proposed recycling program would need to be phased in by the county over a 3 to 5 year period. The county could start the program small and add locations and methods of collection each year. One possibility for the county is to start the program by contracting with a private company who would collect the materials at various points throughout the county and transport them to the appropriate recycling centers.

A second alternative for recycling is to implement a system of composting. As mentioned in Section VII, yard wastes can account for as much as 20% of a community's total solid waste. By committing a portion of the total yard waste to recycling, Sumter County could easily reach the 25% goal. Composting can be achieved both on an individual and community-wide basis. Citizens and business owners can create small composts to handle grass clippings, leaves and small limbs. The county, or municipalities can create more large-scale composts to be used by the citizens and city forces. Yard wastes and tree debris could be collected by the municipalities or county, or could be transported to the compost site by the public. The compost material would result in a dramatic landfill area savings and could ultimately be sold by the county.

IX. ECONOMIC CONSIDERATIONS

In order for Sumter County to choose the best alternatives for solid waste collection and disposal, all economic aspects must be considered. The county must work to provide the best possible service for all residents at affordable rates. As a part of this solid waste plan, economic factors are evaluated for collection, disposal, and recycling of solid waste. These factors, coupled with the environmental considerations noted throughout the report will form a composite basis for determining which options the county should pursue.

The first economic consideration is the collection of solid waste from a private company. The County and Municipalities are in the process of soliciting bids from companies for the collection services of a county as a whole. This will put the responsibility of operating the system including maintaining equipment and personnel on the private company. A major disadvantage is this might drive the price per customer for collection up. Presently the County is charging its 2800 rural residents \$15 a month. The City of Livingston charges its 1156 residents \$26 a month, and the City of York charges its 926 residents \$16 a month. The Town of Cuba charges its 150 residents \$5 a month for collection services.

The second economic consideration is for disposal of all solid waste. Currently, tipping fees are calculated into the amount that residents pay for solid waste collection. It is currently not economically feasible for Sumter County to construct a regional landfill.

The third economic consideration is for a recycling program in Sumter County. Currently, only the City of Livingston has a recycling program. Recent data showed pricing for materials as \$60-\$70/ton for cardboard, \$60-\$70/ton for newspapers, \$80-\$90/ton for magazines, \$0.50/lb for aluminum, and \$30/ton for clear glass. To reach the 25% goal for recycling, the county would need to recycle approximately 1,530 tons per year. If the City of Livingston recycling center can't reach this goal, an expansion of the facility should be considered.

X. CONCLUSIONS AND RECCOMMENDATIONS

Sumter County currently generates approximately 6,155 tons per year of solid waste. For design purposes, a value of 8,000 tons per year can be expected for the next 10-year period. All solid waste generated in the county is collected and disposed of by the municipalities and the county commission. Solid waste is disposed of in the Pine Ridge Sanitary Landfill in Meridian, Mississippi.

Three aspects of the solid waste system were evaluated as a part of this plan. First, solid waste collection alternatives were presented including maintaining the current system with collection by the county or local municipality, or contracting the collection to a private company. Second, disposal alternatives were also discussed including utilizing private landfills and the possible construction of a regional landfill. Finally, recycling programs were analyzed and suggestions made to implement increased recycling and public education.

XI. GUIDELINES FOR LOCAL APPROVAL OF NEW OR EXPANDED FACILITES

1. General

The requirements for the implementation of the plans, the review of the plans for the proposed solid waste management facilities, and the review of proposed modifications of permits for existing facilities by county governing bodies are contained within Section 9 of Act No. 89-824. The county governing body is committed to provide appropriate opportunities for public involvement in the review of proposals for solid waste management facilities within the jurisdiction that may be presented to the governing body for approval.

Planning and Zoning is the principal means for the county to guide its future growth and achieve a logical pattern of land use and development for the county. The Planning and Zoning Department or Commission typically ensures that all new development meets specific guidelines and requirements related to the adequacy of roads, parking, traffic flow, setbacks, drainage, utilities, etc. Any proposed solid waste transfer stations, disposal facilities or processing facilities shall also be located in areas that are appropriately zoned for each type of facility.

Individuals, partnerships, companies, corporations, regional authorizes, the county governing body, or municipal governing bodies desiring to locate solid waste management facilities within the jurisdiction of the county or seeking modification to the permit for new or existing solid waste management facilities, unless specifically exempt by state or federal statues, hereinafter referred to as the applicant, shall submit a letter of intent to the county governing body along with a detailed report. The detailed report shall contained detailed plans for the facility or proposed changes to the permit for existing facilities. The report shall also address the particular items by Section 9 of Act No. 89-824.

The county governing body shall review the letter of intent and shall require the applicant to make provision for proper advertising, review period, and public hearing for the proposal in accord with the requirements of Section 9 of Act 89-824.

This review is conducted by the county governing body will cover the following items:

A. Is the proposal for the applicant compatible with the existing and future needs of the county for the management of solid waste?

B. Does the proposal of the applicant adequately provide the protection of the environment, and has consideration been given to the affects the proposal of the applicant may have on air, surface water, and groundwater quality?

C. Has consideration been given by the applicant to the effects the proposal may have on adjoining and nearby property that may be impacted?

D. Is the proposal of the applicant compatible with the existing utilities and transportation infrastructure of the county?

E. Has consideration been given by the applicant to the affect the proposal may have been on the social, economic, aesthetic, and community values of the citizens within the county?

2. Location

The location of solid waste management facilities must be determined by using a balancing test. The balance must be between the public health, safety, and welfare on one side and a suitable site for a solid waste management facility, which included drainage, soil, proximity to the ground water and

surface water, infrastructure, hauling distance, and adjacent land use on the other hand. The EPA has established key factors to act as guidelines in determining the location of solid waste management facilities. The county should look at the EPA's current key factors if it must decide on the location of a solid waste management facility and take these factors into determination when deciding the location.

3. Specific Requirements or Considerations

When the jurisdiction is considering future Solid Waste Management Facilities, it should consider the following items. The jurisdiction should use the following items in order to help the jurisdiction make a logical decision as to the fate of the Solid Waste Management Facility.

3.1 Is the proposal consistent with the county's SWMP or the needs of the county as they pertain to the SWMP?

When a proposed facility is up for consideration, the SWMP should be reviewed to determine if the proposed facility complies with a need described in the pain. If the facility does not comply, the jurisdiction should look to see if the need is one that has come into existence since the plan was written. If there is no need, then the facility may not be appropriate for the jurisdiction.

3.2 What is the relationship of the proposed facility to local planned or existing development, or the absence thereof, to major transportation arteries and to existing state and secondary roads?

Transportation is a critical element for a proposed waste management facility. The jurisdiction's engineering department should be consulted to determine if there is an adequate transportation system to and from the location of the proposed waste management facility.

3.3 What is the location of the proposed facility in relation to existing industries in the State that generate large quantities of solid waste, or the relationship to areas projected for development of industries that will generate solid waste?

If the proposed waste management facility is to serve existing industries in the jurisdiction, then the ideal location of the waste management facility is one that is as near to the industry as possible. If a nearby location is not feasible, then the location should be one that has sufficient transportation system for the facility.

3.4 What is the availability of public services, utilities, and improvements required to support the proposed facility and protect public health, safety, welfare, and the environment?

A solid waste management facility will require specific services and utilities. As discussed previously, a good transportation system is needed to make sure than waste can be easily transported to the facility. Fire and police protection are also necessary for the facility. The facility will also need utilities such as water, sewer, and power. The proposed plan should address each of these issues and the jurisdiction's department of engineering should be consulted on these issues.

3.5 What are, if any, the impacts of a proposed facility on public safety and what provisions are made to minimize the impact on public health and safety?

The proposed solid waste management facility should be designed to minimize the impact on public health and safety.

3.6 What are, if any, the social and economic impacts of a proposed facility on the affected community, including changes in property value, and social or community perception?

The jurisdiction shall take into account the impact of the proposed solid waste management facility, whether they are positive or negative, on the community. The jurisdiction shall evaluate a proposed waste management facility's location, impact on public health and safety, the availability of public facilities, impact on property value, and the creation of jobs when considering the effect of the facility on the community. The jurisdiction shall also listen to the comment and concerns of the public when considering the facility.

4. Current Proposals of Waste Management Facilities

Currently, there are no proposals for Solid Waste Management Facilities in Sumter County.

XII. PUBLIC PARTICIPATION

Sumter County must seek to involve the public in the approval of this Solid Waste Management Plan. A copy of the draft plan was made available at the Commission's office for public review. A public hearing will need to be announced and held at the Sumter County Courthouse. A copy of the draft plan will also be sent to all the municipalities within the county for their review and comments. All information received from the municipalities will be evaluated by the county and incorporated into the final plan. The municipalities will be encouraged to pass a resolution in support of the plan and adhere to the recommendations in any future changes in handling their solid waste.

The public should also be involved in any changes to the existing solid waste system including collection contracts, siting of landfills, and proposed changes in recycling. One possible way this can be accomplished is by the development of a Citizens Solid Waste Advisory Committee. Although the ultimate decision to make changes to the system would remain with the Sumter County Commission, the advisory committee would be allowed to make recommendations and aid the county in evaluating alternatives. The committee should be made up of citizens from all municipalities and rural areas within the county. The committee should be responsible for organizing additional public hearings and should be made aware of all proceedings before changes are made.

XIII. 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 includes 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. This Plan is in compliance with RCRA, 42 U.S.C. Section 6941.

XIV. REFERENCES

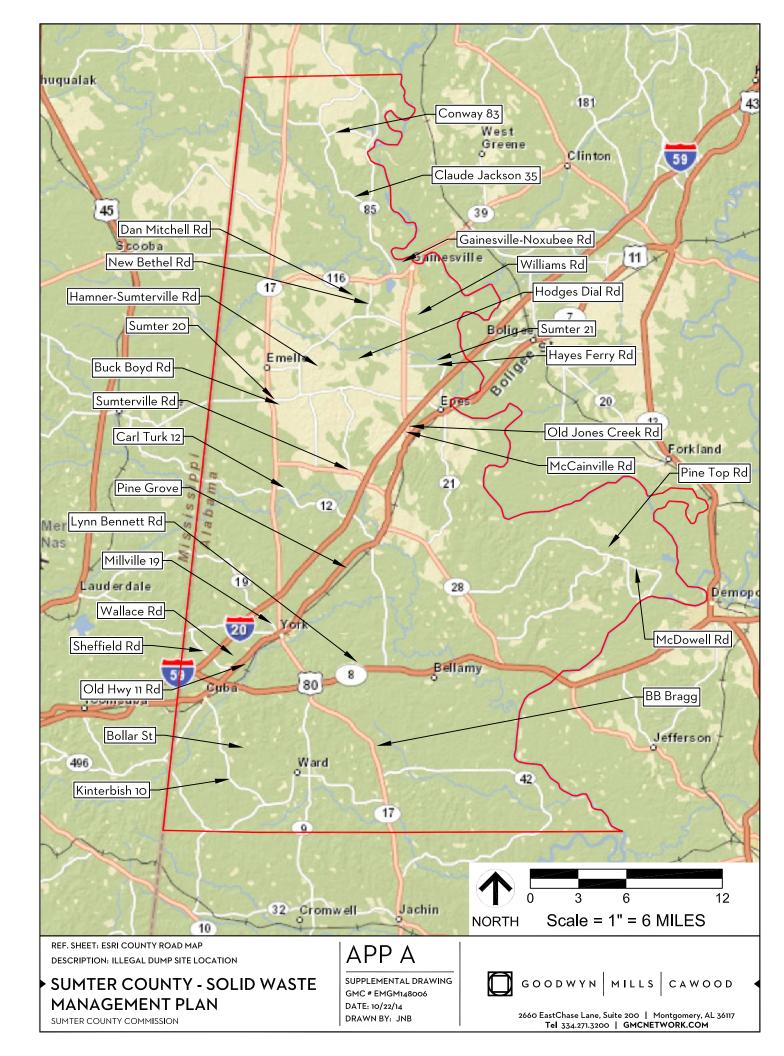
Alabama Department of Environmental Management, Alabama Solid Waste Management Plan. July, 2013. http://www.adem.state.al.us/default.cnt

Environmental Protection Agency, Municipal Solid Waste Generation in the United States. July, 2013. http://www.epa.gov/epawaste/nonhaz/municipal/index.htm

University of Alabama Center for Business and Economic Research, 2010 Census for Alabama. July, 2013. http://cber.cba.ua.edu/data.html.

APPENDIX A

ILLEGAL DUMP SITES MAP



APPENDIX B

LETTERS OF APPROVAL

November 13, 2014

Mayor Thomas Tartt, III City of Livingston Livingston, Alabama 35470

RE: Solid Waste Management Plan Sumter County, Alabama

Mayor Tartt:

Goodwyn, Mills, and Cawood, Inc. (GMC) has been retained by the Sumter County Commission to update the Solid Waste Management Plan (SWMP) for the county as required by the Alabama Department of Environmental Management. The plan must provide for the collection, disposal and recycling of all waste in the municipalities and rural areas within Sumter County for the next 10 years.

As a part of the plan, the county is required to obtain approval and/or comments from each municipality included in the plan. Attached is the final draft of the SWMP for Sumter County. Please review the plan and send any comments you may have back to GMC at Bobby.Douglass@gmcnetwork.com.

If you choose not to participate in the county's plan, you will be required by ADEM to complete your own plan. Please let us know in writing if you would like to opt out of the proposed Sumter County SWMP.

Upon your approval of the SWMP, please sign in the space provided below and return to the email address listed above or to my attention at 2660 EastChase Lane, Montgomery, Alabama 36117.

Please feel free to give me a call if you have any questions at (334) 271-3200.

Respectfully,

ust N. K.t.

Justin Barrett, EI, CFM

Mayor Thomas Tartt, III

GOODWYN, MILLS AND CAWOOD, INC.

2660 EastChase Lono, Suite 200 Montgomery, AL 36117 Tel 334.271.5200 - Fax 334.272.1566 G M C N E T W O R K, C O M A A STATE A DI ATE A ST

January 8, 2015

Mayor Michael Cunningham, Sr. Town of Geiger Geiger, Alabama 35459

RE: Solid Waste Management Plan Sumter County, Alabama

Mayor Cunningham:

Goodwyn, Mills, and Cawood, Inc. (GMC) has been retained by the Sumter County Commission to update the Solid Waste Management Plan (SWMP) for the county as required by the Alabama Department of Environmental Management. The plan must provide for the collection, disposal and recycling of all waste in the municipalities and rural areas within Sumter County for the next 10 years.

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Respectfully,

+ N.

Justin Barrett, EI, CFM

Mayor Michael Cunningham, Sr.

November 13, 2014

Mayor Gena Robbins Town of York York, Alabama 36925

RE: Solid Waste Management Plan Sumter County, Alabama

Mayor Robbins:

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Respectfully, 1. N. -

Justin Barrett, EI, CFM

Mayor Gena Robbins

GOODWYN, MILLS AND CAWOOD, INC. 2660 EastChase Lane, Suite 200 Montgomery, AL 3617 Tel 334.271.3200 Fax 334.272.1566 GMCNETWORK.COM

GOODWYN MILLS CAWOOD

November 13, 2014

Mayor Roy Willingham Town of Emelle Emelle, Alabama 35459

RE: Solid Waste Management Plan Sumter County, Alabama

Mayor Willingham:

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t. N. B.t.

Justin Barrett, EI, CFM

<u>Millingham</u> Sr. Willingham

GOODWYN, MILES AND CAWOOD, INC.

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PAGE 02

TOWN OF EMELLE

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February 9, 2015

Mayor Carrie Fulghum Town of Gainesville Gainesville, Alabama 35464

RE: Solid Waste Management Plan Sumter County, Alabama

Mayor Fulghum:

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lut N. B.t.

Justin Barrett, EL CFM

Mayor Carrie Fulghum



GOODWYN MILLS CAWOOD

November 13, 2014

Mayor Walter Porter, Sr. Town of Epes PO Box 127 Epes, Alabama 35460

RE: Solid Waste Management Plan Sumter County, Alabama

Mayor Porter:

Goodwyn, Mills, and Cawood, Inc. (GMC) has been retained by the Sumter County Commission to update the Solid Waste Management Plan (SWMP) for the county as required by the Alabama Department of Environmental Management. The plan must provide for the collection, disposal and recycling of all waste in the municipalities and rural areas within Sumter County for the next 10 years.

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Respectfully,

ut N. K.t.

Justin Barrett, EI, CFM

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Mayor Walter Porter, Sr.

GOODWYN, MILLS AND CAWOOD, INC. 2660 EastChase Lane, Suite 200 Montgomery, AL 36117 Tel 334.271.3200 Fax 334.272.1566 GMCNETWORK, COM November 13, 2014

Mayor Carl Storey Town of Cuba Cuba, Alabama 36907

RE: Solid Waste Management Plan Sumter County, Alabama

Mayor Storey:

Goodwyn, Mills, and Cawood, Inc. (GMC) has been retained by the Sumter County Commission to update the Solid Waste Management Plan (SWMP) for the county as required by the Alabama Department of Environmental Management. The plan must provide for the collection, disposal and recycling of all waste in the municipalities and rural areas within Sumter County for the next 10 years.

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Please feel free to give me a call if you have any questions at (334) 271-3200.

Respectfully, Just N. Batt

Justin Barrett, EI, CFM

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TRANSPORTATION

SURVEYING

NNNG

LANDSCAPE

DESIGN

NTERIOR

GEOTECHNICAL

ENVIRONMENTAL

ENGINEERING

ARCHITECTURE

Mayor Carl Storey

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