



Solid Waste Management Authority Evaluation

Baldwin County, Alabama

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INTRODUCTION

Solid waste collection and disposal in Baldwin County is managed by a combination of public and private sector entities. Probably no aspect of county government has changed more than the management of solid waste for counties across the U.S. in the last 30 years. The Federal Government passed sweeping changes to landfill regulation with passage of the Subtitle D regulations to the Resource Conservation Recovery Act (“RCRA”) released in 1988. In 1989, in response to the Subtitle D regulations, the Alabama State Legislature enacted Alabama Law 89-824 (i.e. the “Holley Act”) to amend the Solid Wastes Disposal Act which required several actions to be completed that addressed solid waste management in the State. Each county was required to submit to ADEM, within one and one-half years of May 16, 1989, a plan for the management of solid waste generated within its boundaries. Each plan was required to address the requirements proposed under Subtitle D of the Federal RCRA (Resource Conservation and Recovery Act, 42 U.S.C. Section 6941 as amended).

The Baldwin County Commission, as required by the new Holley Act, developed and implemented a Comprehensive Solid Waste Management Plan (“SWMP”) on November 19, 1990. Every county is required to update its SWMP on a decennial basis. The County’s current plan is the Baldwin County Comprehensive Solid Waste Management Plan 2014 – 2024. A primary goal of the County’s current Plan is to develop “an *integrated solid waste management* approach to managing solid waste throughout the county, with greater participation with the public and private entities managing solid waste within the county.”

EPA defines Integrated Solid Waste Management (ISWM) as:

“a comprehensive waste prevention, recycling, composting, and disposal program. An effective ISWM system considers how to prevent, recycle, and manage solid waste in ways that most effectively protect human health and the environment. ISWM involves evaluating local needs and conditions, and then selecting and combining the most appropriate waste management activities for those conditions. The major ISWM activities are waste prevention, recycling and composting, and energy recovery and disposal in properly designed, constructed, and managed landfills.”

EPA developed a non-hazardous materials and waste management hierarchy in recognition that no single waste management approach is suitable for managing all materials and waste streams in all situations. To develop an integrated waste management plan, a local government should prioritize and utilize the capacities available to manage the amount of solid waste generated within its jurisdiction according to a hierarchy approach. The hierarchy ranks the various management strategies from most to least environmentally preferred. The hierarchy places emphasis on reducing, reusing, and recycling as key to sustainable materials management. The accepted EPA hierarchy comes from the following methods of integrated solid waste management:

- a) Source Reduction and Reuse
- b) Recycling and Composting
- c) Energy Recovery (formerly “combustion”)
- d) Treatment and Disposal

Source reduction is sometimes referred to as waste prevention and means reducing waste at the source. It can take many different forms, including reusing or donating items, buying in bulk, redesigning packaging/products, and reducing toxicity.

Recycling is a series of activities that includes collecting used, reused, or unused items that would otherwise be considered waste; sorting and processing the recyclable products into raw materials for remanufacturing; and remanufacturing the recycled raw materials into new products. Recycling also can include **composting** of food scraps, yard trimmings, and other organic materials.

Energy recovery or waste-to-energy (WTE) from waste is the conversion of non-recyclable waste materials into useable heat, electricity, or fuel through a variety of processes, including combustion, gasification, pyrolysis, anaerobic digestion, and landfill gas (LFG) recovery.

Treatment and Disposal. Prior to disposal, treatment can help reduce the volume and toxicity of waste. Treatments can be physical (e.g., shredding), chemical (e.g., incineration), and biological (e.g., anaerobic digester). Modern landfills are the most common form of waste disposal and are an important component of an integrated waste management system.

SUMMARY – REGULATORY & LEGISLATIVE ISSUES

There are a myriad of laws, regulations and guidelines that solid waste collection and disposal management programs need to comply with whether managed by a local government or a SWDA. In Alabama, the ADPH (Alabama Department of Public Health) administers the regulations for the collection and transportation of solid waste including the permitting/approval of solid waste transfer stations. ADEM (Alabama Department of Environmental Management) administers the regulations for the treatment, processing and disposal of solid waste. Additionally, ADEM issues the guidelines and goals for recycling and waste minimization initiatives throughout the State. The major focus of this review is the ADEM regulations and programs. The major regulation milestones are summarized below (greater detail of this summary is in the subsection that immediately follows):

1988 – Finalization/promulgation of Subtitle D of RCRA

1989 - In response to the Subtitle D regulations in 1988, the Alabama State Legislature enacted Alabama Law 89-824 to amend the Solid Wastes Disposal Act which required several actions to be completed that addressed solid waste management in the State.

1990 – Clean Air Act amended to include New Source Performance Standards (NSPS)

1991 – First statewide solid waste management plan of Alabama developed

1991 - Subtitle D, with its emphasis on landfill containment, became effective

1993 – Subtitle D primary components implementation

1996 - NSPS of the Clean Air Act implementation

1997 – Subtitle D final components were implemented

2002 - State Solid Waste Management Plan developed in 1991 and adopted into the regulations in 2002 recommended a statewide municipal solid waste recycling goal of 25%.

2006 - EPA's 2006 Strategic Plan established a nationwide municipal solid waste recycling goal of 40% by 2011, while maintaining its prior goal of 35% recycling by 2008.

2007 - EMC (Alabama Environmental Management Commission) adopted revised regulations that would exempt certain electronics waste destined for

recycling from the definition of solid waste to encourage recycling electronics

2008 - The Solid Wastes and Recyclable Materials Management Act (SWRMMA) was signed into law by Governor Bob Riley on April 15, 2008.

2015 – CAA (Clean Air Act) – Proposed Rule for Landfill Air Emission Guidelines

Other – Carbon reduction (i.e. climate change) and Renewable fuel standards

DETAILED – REGULATORY & LEGISLATIVE ISSUES

The Solid Waste Disposal Act of 1965 was enacted by the U.S. Congress and regulations resulting from this Act, and subsequent amendments, are codified in the Code of Federal Regulations (CFR). The Resource Conservation and Recovery Act (RCRA) enacted in 1976 was an amendment to the Solid Waste Disposal Act. RCRA is a combination of the first federal solid waste statutes and all subsequent amendments. These statutes and amendments describe the waste management program mandated by Congress that gave the EPA authority to develop the RCRA program. These EPA regulations carry out the congressional intent by providing explicit, legally enforceable requirements for waste management. RCRA has been amended several times, one of the most significant amendments being in 1988 with promulgation of Subtitle D of RCRA. These regulations can be found in Title 40 of the Code of Federal Regulations (CFR), part 258.

This amendment established requirements for municipal solid waste disposal facilities in Subtitle D of the Act. Requirements for municipal solid waste landfills are commonly referred to Subtitle “D” requirements.

Subtitle D, with its emphasis on landfill containment became effective in October 1991, although various implementation deadline extensions existed through 1997. The rules established minimum landfill criteria for: Location/Siting; Operation, including daily cover requirements; Design, including liner and leachate collection system installation, with a recirculation option for landfills with composite liners; Groundwater monitoring and corrective action; Closure and post-closure care; and Financial assurance.

Subtitle D established the minimum landfill management requirements and each individual state was required to pass comparable regulations to meet or exceed the Subtitle D regulations. Each state was required to submit plans proving that it met the minimum criteria.

In 1989, in response to the Subtitle D regulations in 1988, the Alabama State Legislature enacted Alabama Law 89-824 to amend the Solid Wastes Disposal Act which required several actions to be completed that addressed solid waste management in the State. One of these actions required the Alabama Department of Environmental Management (ADEM) to prepare an Alabama Solid Waste Management Plan. The Law required that the Plan be initially prepared in two phases. The first phase was completed in November 1989, and served as a guide to local governments in the development of their local solid waste management plan.

Phase II was completed in April 1991, and refined previously gathered solid waste management data, as well as identified a number of recommended statutory improvements to the State's management of solid waste. The law also established the criteria that should be included in any amendment or periodic revision to the Plan. In 2002, the Alabama Environmental Management Commission (EMC) adopted these original two phases of the Solid Waste Management Plan into the ADEM solid waste regulations.

ADEM's Administrative Codes in Division 13 Land Division - Solid Waste Program establishes regulations which are at least as stringent as the Subtitle D. ADEM permits and enforces compliance with these regulations.

Alabama statutory authority for solid waste management derives from §22-27-1, et seq., Code of Alabama (1975). Solid waste regulations are promulgated through ADEM Administrative Codes. Local government responsibilities and roles in solid waste management have historically been based on the premise that solid waste management is an appropriate exercise of general government police power to provide for the safety of the public.

There are many regulations that solid waste collection and disposal management programs need to comply with; however, many of these laws and regulations, when utilized correctly, can provide local governmental agencies the necessary tools and powers to effectively optimize their management systems.

Local governments using the authority provided by state laws have the ability to:

- Choose to either be involved or not involved in solid waste management;
- Regulate the collection of solid wastes within their jurisdiction;
- Dispose of solid wastes within their jurisdiction;
- License private companies to provide solid waste management services within their jurisdiction;
- Define the types of solid waste storage containers to be used;
- License and regulate the types of collection vehicles to be used;
- Fund solid waste management systems through tax-based revenues and/or user fees;
- Contract with private service providers to provide services;
- Grant exclusive rights to a single private service provider to provide services within their jurisdiction; and
- Establish authorities to make choices about services within their jurisdiction by the passage of ordinances.

Statewide Waste Minimization Goals

ADEM Admin. Code 335-13-13-.02 specifies a Statewide Solid Waste Reduction Goal of 25%. In FY2018, the Solid Waste Reduction Rate was calculated to exceed the 25% goal for the first time since the rate began being tracked and reported. In addition to providing data to calculate our Statewide goal, Re-TRAC Connect, which is an ADEM tracking program, also allows the Department to collect data to submit to the EPA State Data Measurement Program (SDMP). This program allows all States to share and compare data with each other and with the EPA. Alabama was one of the original States to be instrumental in the development of this program and has been recognized by the EPA for their assistance throughout the years. Each year, Re-TRAC Connect improvements allow the Department to add additional data types to the report and further assist the EPA to track the progress of waste reduction and recycling on a national level.

Both the Act and the ADEM regulations encourage waste minimization and recycling as key components of the State's overall solid waste management program. Pursuant to Ala. Code §22-27-45, (2006), the State Solid Waste Management Plan developed in 1991 and adopted into the regulations in 2002 recommended a statewide municipal solid waste recycling goal of 25%. In the U.S. Environmental Protection Agency's 2006 Strategic Plan, the EPA established a nationwide municipal solid waste recycling goal of 40% by 2011, while maintaining its prior goal of 35% recycling by 2008.

Alabama's commitment to recycling and waste reduction, under Alabama Law 90-564-3(b), and subsequently Ala. Code §22-22B-3(b), (2006), requires state agencies and public school systems to report recycling activities annually to ADEM. Initially the Department jointly employed a staff member with the Alabama Department of Economic and Community Affairs (ADECA) to handle the annual state recycling report. In subsequent years, recycling reports from state agencies and public school systems were handled solely by ADECA, which supplied ADEM with a report

summary of state agency recycling activities. In 2003, ADEM's Permits & Services Division took over all tasks required for compiling this report. During 2005, nearly 30,000,000 pounds of materials were recycled. The largest amounts recycled were paper waste (30%) and automotive batteries and oil (22%).

In 2007 under the Hazardous Waste Program, the EMC adopted revised regulations that would exempt certain electronics waste destined for recycling from the definition of solid waste. These revisions followed similar federal regulatory revisions promulgated by the EPA in July 2006. These changes should encourage a greater level of recycling electronics by eliminating certain requirements relating to the management of these items.

The Solid Wastes and Recyclable Materials Management Act (SWRMMA) was signed into law by Governor Bob Riley on April 15, 2008. This legislation marked the culmination of nearly two decades of effort by the Alabama Department of Environmental Management (ADEM or Department) and numerous stakeholders to pass needed revisions to the State Solid Waste statute. The four main purposes to the SWRMMA are as follows:

- Provide stable funding for ADEM's solid waste and recycling programs;
- Provide fiscal resources to remediate unauthorized dumps/illegal disposal sites;
- Establish a grants program for local recycling efforts; and
- Establish a Statewide waste reduction/recycling program, goal, and measurement methodology.

Since the passage of the SWRMMA, the Department has worked diligently to implement its requirements. Several revisions and additions to the Department's Solid Waste program regulations have been made, while others are currently under development for future promulgation. Chief among these revisions were the

establishment of the Alabama Recycling Fund (ARF) Grants program, the Solid Waste Fund (SWF) Site Remediation program, the Landfill Operator Certification program, a Statewide Solid Waste Reduction goal, and the Recycling Facility and Composting programs.

The SWRMMA established a statewide solid waste disposal fee of \$1.00 or \$0.25/cubic yard for all solid waste disposed in Alabama landfills. The revenues generated by this fee have enabled the Department to add needed staff necessary to carry out the programmatic requirements of the law. The funding has led to a significant reduction in unauthorized dumps (UAD's) and an increase in the overall compliance rate at permitted landfills from 57% for FY 2008 to 98% in FY 2016, as determined by the number of formal enforcement actions relative to the number of compliance inspections conducted.

The ARF grant program has awarded local governments more than \$13.75 million dollars since its inception in 2009. By returning these funds to local communities, the ADEM has played a key role in the creation or expansion of nearly 20 local recycling programs which have been instrumental in diverting significant quantities of solid waste from landfills, providing economic benefits to the local governments, as well as to their private enterprise partners, and preserving our State's natural resources.

The Solid Waste Reduction Goal of 25% was established in the 1991 State Solid Waste Management Plan and was retained in the 2008 update to the Alabama Solid Waste Management Plan. Recycling facilities are required to register with ADEM and report on their activities regarding collection and processing of recyclable commodities using a web based reporting tool. The Solid Waste Reduction rate monitored by ADEM is currently calculated at over 25%, approximately triple the rate calculated in 2008.

Climate Change/Carbon Reduction. It is recognized in the solid waste industry that climate change (carbon reduction) is a potential issue for state and federal regulations to crack down on greenhouse gas emissions from solid waste operations. Given that landfill emissions remain one of the industry's biggest climate change/regulatory liabilities, many organizations (public and private) have pursued landfill gas-to-energy projects as a way of demonstrating compliance and generating additional revenue.

WASTE MINIMIZATION & RECYCLING

A primary goal in developing an *integrated solid waste management* program is minimization of waste requiring disposal.

Waste minimization is "the reduction, to the extent feasible, of waste that is generated or subsequently treated, stored or disposed of. It includes any source reduction or recycling activity undertaken by a generator or facility operator that results in either:

- (i) the reduction of total volume or quantity of waste, or
- (ii) the reduction of toxicity or other characteristics of hazardous waste, or both, so long as the reduction is consistent with the goal of minimizing present and future threats to human health and the environment.

Waste minimization may be applied to any component of the waste stream before that component is disposed of as a waste. Waste minimization efforts will result in a decrease in the rate of growth of the waste stream and in the overall quantity of waste requiring disposal, as well as processing.

There are three (3) major methods of waste minimization:

1. Reduction
2. Reuse
3. Recycling

The success of recycling and waste processing programs are becoming more dependent on the success or ability of a program to market or develop a beneficial reuse for the program's products and commodities. For recycling programs, the ability of recycling programs to have long-term commitments to sell its commodities is a vital part of a recycling programs success. The ability to market a program's commodities is becoming more and more complex.

Small and mid-sized recycling programs are particularly vulnerable to price increases and program changes. In order to establish long-term and stable commitments to sell its commodities, recycling programs will need to the ability to generate quality commodities on a consistent basis.

The China's National Sword campaign went into effect in 2018 to eliminate or reduce "foreign waste" including plastics, industrial waste, electronics and other household waste materials. (Chinese leaders formally announced their import intentions in a notice to the World Trade Organization in July of 2017, and the ban went into force at the start of 2018. But efforts to reduce "foreign waste" go all the way back to the start of the country's Green Fence customs crackdown in 2013.). The National Sword program has had a significant effect on low-quality commodities received from poorly run U.S. facilities that include household waste, undesirable plastic waste and electronic waste.

In the past the U.S. has counted on China to accept plastic exports. Recycling programs exporting mixed plastics and mixed paper because of their low-grade quality have been hardest hit by these recent changes.

In the future, recycling programs may need to perform more processing in order to adapt to and secure commodity markets. For example instead of exporting plastic film scrap overseas, a recycling program may need to pelletize plastic film scrap into post-consumer resin (PCR) for domestic sale. Programs that are able to adapt to the commodity markets by featuring additional processing capabilities could possibly

become secondary processors (for a fee) for other recycling programs in the regional area.

There is also a solid waste industry wide issue with recruiting and maintaining adequate unskilled labor to operate recycling processing facilities and MRFs (material recovery facilities). Due to these changing labor patterns, successful MRFs and other processing facilities may be more dependent on robotics and mechanized systems that will utilize more skilled labor. This will entail a more sophisticated approach and management as well as additional upfront capitalization.

SOLID WASTE AUTHORITY CONCEPT

A solid waste disposal authority (“SWDA”) can play a vital role in the development of an *integrated solid waste management system* by providing state-of-the-art facilities for solid waste recycling and processing for the County and the regional area as well as, in Baldwin County’s situation, landfill gas to energy programs. In order to develop a fully integrated waste management system, there will be a need for these state-of-the-art facilities in the regional area now and in the future. The County’s role is to fill the need for developer/facility owner, operator, aggregator/controller of the waste stream and/or facilitator for modern integrated solid waste management systems. This need is largely unmet by the private sector national solid waste collection and disposal companies and it is likely to remain that way.

In order to fulfill this role to the highest level, the County will need resources that are not conventionally available to a county government. These resource issues can be fully addressed by the provisions of Title 11-89A, et seq. Code of Alabama 1975 which are tailor made for the development of integrated solid waste management programs by the formation of a solid waste disposal authority.

Throughout Alabama, it is recognized that SWDAs are an accepted modern approach to the management of a county or city solid waste collection and disposal infrastructure and assets. According to the Alabama Secretary of State's Office there are 70 SWDAs statewide. The breakdown of SWDAs and whether they are county, city or regionally established is as follows:

32 county established SWDAs

28 city established SWDAs

10 regionally established SWDAs.

Of the 70 SWDAs the majority of these (i.e. 37) were formed in the Subtitle D formation era of 1988 – 1993. Twenty-nine (29) SWDAs were formed after Subtitle D's implementation date of 1993. Four (4) were formed before 1988.

By forming a solid waste authority based on the establishment of a fully functioning integrated solid waste management program, Baldwin County can:

- Designate a board of commissioners (i.e. citizens of Baldwin County) with an executive director who has the responsibility and accountability to manage and improve solid waste programs in the County
- Continue as low cost service provider of residential solid waste collection and disposal
- Maximize the useful life of disposal (i.e. capacity assurance) and other solid waste management facilities located in the County
- Reduce litter and illegal dumping in the County
- Establish Baldwin County as a leader in recycling and pollution prevention programs in the regional area
- Be a resource, clearing house and coordinator of solid waste management programs for the municipalities and community groups in the County
- Increase the efficiency and effectiveness of the recycling and waste services available to the citizens, commercial businesses and industries in the County

- Use BATs (best available technologies), which are ever changing, to develop and employ BMTs (best management practices).
- Facilitate continuous improvement of solid waste recycling and processing infrastructure in the regional area

The solid waste authority would be the governmental agency of Baldwin County responsible for providing an economical and environmentally conscious integrated solid waste management system to the County and all of its citizens.

In addition to providing materials for reuse in the community (i.e. recycling commodities, mulch and construction materials, landfill gas to energy), the establishment of state-of-the-art recycling and processing facilities would reduce the County's dependence on landfills and extend the life of the currently approved landfills within the County.

If managed as a private solid waste collection and disposal business, an authority should be able to provide services for less money than the private sector, which would benefit taxpayers. The authority operates for less cost because does not pay taxes on many goods and services, buys equipment at a lower price and has lower costs of capital/bonding.

A public solid waste authority should be able to operate on a lower cost basis but it will need to be as efficient and productive as its private sector counterparts to realize the cost savings. The general manager of a solid waste authority should be charged to:

- Implement best management practices and systems used in the industry
- Develop and execute business plans that are economically feasible and consistent with the authority's objectives
- Establish a stable organization and cost structure
- Deliver a high level of member/consumer satisfaction and confidence.

If managed properly, an authority should be able to operate on a sustainable basis with a small surplus.

Advantages of a solid waste authority:

- Long-term low-cost provider of solid waste services
- Pricing stability long-term
- Capacity assurance long-term for MSW and C&D disposal volumes
- Development of an integrated system of waste collection, processing and disposal
- Ability to take advantage of cutting edge and innovative waste-to-energy (WTE) technologies that are economically unfeasible for Baldwin County by itself
- Continuous waste stream assurance for disposal and waste processing strategies and facilities.
- Accountability and empowerment to control community waste related programs such as illegal dumping
- Ability to take advantage of modern state-of-the-art technologies without reliance on the private sector
- Strengthen opportunities for solid waste related matching grants and loans by pooling revenue and spreading costs
- Development of sustainable recycling and processing services
- Uniform fees for authority customers
- Authority is Service motivated, not profit motivated
- Greater attention to pollution prevention programs (i.e. illegal dumping and anti-litter)

Disadvantages:

Normal risks associated with operating a business enterprise, if not managed properly:

- Expenses could outweigh revenues causing short-term instability and reduction in services
- Poor leadership or improper training, operation or management could lead to poor service and instability

SWDAs in Baldwin County

There are a few options to consider when forming a solid waste disposal authority in Alabama. Some states allow the formation of SWDAs in districts (similar to fire protection districts) or by using local and private legislation. In Alabama a few districts have been formed in the past but the use of the Title 11-89A Solid Waste Disposal Authorities in Alabama provides a unique and flexible set of laws tailor-made for a successful solid waste organization. Other options include whether a SWDA is a regional (more than 1 county) authority, a single county authority that includes some or all of its municipalities or a single member authority consisting on just a single county with no municipalities. In the case with Baldwin County, the current strategic assets (i.e. Magnolia Landfill, C&D Landfills and county-wide solid waste collection assets) are owned and operated by the County Commission. It only makes economic sense that the County form a single member SWDA. Additionally, it would be very difficult to get all 14 municipalities together to agree on membership interests, voting strengths, directors, bylaws, etc. Even though the County Commission would be forming the SWDA it should be that the SWDA is for the benefit of the entire county and its citizens.

There is already an incorporated Baldwin County SWDA. It was formed on December 17, 1993 and is officially named the Baldwin County Solid Waste Disposal Authority, Inc. (the “1993 Authority”). The 1993 Authority was formed pursuant to the provisions of Title 11-89A, et seq. Code of Alabama 1975. The 1993 Authority established a Board of Director with seven (7) members.

The 1993 Authority is not currently active and has not been active for quite a while. If the County is to move forward with an SWDA, we would recommend that the County dissolve the 1993 Authority and start with a new SWDA formed pursuant to the provisions of Title 11-89A, et seq. Code of Alabama 1975 ("Title 11-89A").

There is nothing in the provisions of Title 11-89A that prohibits a jurisdiction (i.e. County government) from forming more than one (1) SWDA. In fact Section 11-89A-22 states:

Incorporation of another authority by same determining subdivision.

The existence of an authority incorporated under the provisions of this chapter shall not prevent the subsequent incorporation under this chapter of another authority pursuant to authority granted by the same determining subdivision.

Title 11-89A provides two (2) basic options for the naming of SWDA's. Section 11-89A-4(2) states as follows:

The name of the authority (which may be a name indicating in a general way the area proposed to be served by the authority and shall include the words "____ Solid Waste Disposal Authority," or "The Solid Waste Disposal Authority of ____," the blank spaces to be filled in with the name of one or more of the determining subdivisions or other geographically descriptive word or words.

A newly formed SWDA could utilize a naming option as follows:

"Baldwin County Solid Waste Disposal Authority"

or perhaps

"Baldwin County Solid Waste Disposal Authority 2020"

There are also three (3) other SWDAs that have been formed by the municipalities within Baldwin County. These SWDAs are as follows:

City of Daphne formed October 26, 1993

City of Gulf Shores formed March 14, 2000

City of Orange Beach formed November 25, 2003

The formation of these other SWDAs within Baldwin County have no indirect or direct impact on the formation/activation of an SWDA by Baldwin County. Including the three (3) listed above, there are fourteen (14) municipalities in Baldwin County. They are as follows:

City of Bay Minette

City of Daphne

Town of Elberta

City of Fairhope

City of Foley

City of Gulf Shores

Town of Loxley

Town of Magnolia Springs

City of Orange Beach

Town of Perdido Beach

City of Robertsdale

Town of Silverhill

City of Spanish Fort

Town of Summerdale

There is no requirement in Title 11-89A that requires a County to include any of the municipalities within its jurisdiction when forming an SWDA; however, an SWDA formed by the County would be able to contract with any of the municipalities within the County without going through a competitive bid process. One of the main advantages to both parties is not necessarily the avoidance of the bid procedure but the fact that SWDA contracts for solid waste collection, transportation and disposal with the municipalities could exceed the usual three (3) year terms (Title 11-89A Section 18 Exemption from competitive bid laws.). The longer contract terms could

have mutual benefits in many situations because such agreements could result in long-term pricing and capacity assurance to the municipalities while at the same time guaranteeing certain revenue(s) and waste flows to the SWDA. In fact, contracts may provide for the continuous disposal solid waste for a term not to exceed 45 years per Title 11-89A Section 15. This ability for long-term agreements will especially be important in the future to bring modern recycling and processing technologies to the citizens of Baldwin County as well as the development of LFG (landfill gas) WTE (waste to energy) projects where the continuity of MSW volumes will be instrumental to a program's success.

A primary goal of a Baldwin County solid waste management organization should be to develop “an *integrated solid waste management* approach to managing solid waste throughout the county, with greater participation with the public and private entities managing solid waste within the county.” The provisions of Title 11-89A “Solid Waste Disposal Authorities” provide an ideal framework for such an organization.

Title 11-89A is broken down into 25 subsections as follows:

Section 11-89A-1 - Legislative findings.

Section 11-89A-2 - Definitions.

Section 11-89A-3 - Filing of application for incorporation of authority; denial or authorization of incorporation by governing body of county or municipality.

Section 11-89A-4 - Incorporation procedure; contents, execution, and filing of certificate of incorporation; notice to Secretary of State.

Section 11-89A-5 - Amendments to certificate of incorporation.

Section 11-89A-6 - Board of directors of authority; election; terms of office; vacancies; qualifications; expenses; meetings; notice and waiver; resolutions; impeachment.

Section 11-89A-7 - Officers of authority.

Section 11-89A-8 - Powers of authority; location of facilities of authority.

Section 11-89A-9 - Bonds of authority, generally.

Section 11-89A-10 - Security for payment of bonds; contracts and agreements to secure.

Section 11-89A-11 - Proceeds from sale of bonds.

Section 11-89A-12 - Refunding bonds.

Section 11-89A-13 - Freedom of authority from supervision and control of state; applicability of Article 1 of Chapter 27 of Title 22.

Section 11-89A-14 - Power of eminent domain.
Section 11-89A-15 - Cooperation, aid, and agreements from and with other bodies.
Section 11-89A-16 - Exemption from taxation, etc.
Section 11-89A-17 - Exemption from usury and interest laws.
Section 11-89A-18 - Exemption from competitive bid laws.
Section 11-89A-19 - Disposition of net earnings of authority.
Section 11-89A-20 - Bonds of authority as legal investments.
Section 11-89A-21 - Dissolution of authority; vesting of title to authority's property.
Section 11-89A-22 - Incorporation of another authority by same determining subdivision.
Section 11-89A-23 - Notice of bond resolution; contest to validity of bonds
Section 11-89A-24 - Cumulative effect of chapter.
Section 11-89A-25 - Liberal construction of chapter.

Some of the key provisions that are pertinent to Baldwin County in its review and consideration of forming an SWDA are outlined below. A full detailed copy of Title 11-89A Solid Waste Disposal Authorities is included in the Appendix.

Section 11-89A-4(8) – Requires the number of members of the board of directors of the authority, which shall be an odd number not less than three.

Section 11-89A-4 (8) The number of members of the board of directors of the authority, which shall be an odd number not less than three, the duration of their respective terms of office (which shall not be in excess of six years) and (subject to the provisions of Section 11-89A-6) the manner of their election or appointment;

This Section of Title 11-89A also outlines the process required to form an SWDA.

Section 11-89A-8 – outlines at least 20 statutory general powers of an SWDA. Nine (9) of these powers are *unique* to SWDAs and provide *unique* opportunities for SWDAs. They are outlined below:

Powers of authority; location of facilities of authority.

(a) Every authority shall have all of the powers necessary and convenient to carry out and effectuate the purposes and provisions of this chapter, including (without limiting the generality of the foregoing) the following powers:

(5) To acquire, whether by gift, purchase, transfer, foreclosure, lease, or otherwise, to construct and to expand, improve, operate, maintain, equip, and furnish one or more facilities, including all real and personal properties that its board may deem necessary in connection therewith, regardless of whether or not any such facility shall then be in existence and, if in existence, regardless of whether or not any such facility is then owned or leased by any person to which such facility may subsequently be sold or leased by such authority;

(6) To borrow money and to sell and issue bonds as hereinafter provided for any corporate use or purpose;

(7) To lease to any person or persons all or any part of any facility or facilities that are or are to be owned by it, to charge and collect rent therefore and to terminate any such lease upon the failure of the lessee to comply with any of the obligations thereof, all upon such terms and conditions as its board may deem advisable;

(8) To contract to sell, convey, or dispose of and to sell, convey, or dispose of all or any part of any recovered resource facility, and to contract to sell, convey, or dispose of all or any part of any recovered resources (including, but not limited to, the granting of options to purchase any recovered resources to any person), all for such consideration and upon such terms and conditions as its board may deem advisable;

(9) To enter into a contract or contracts with any person or persons granting to such person or persons the exclusive right to purchase or acquire from the authority any recovered resources or rights to recovered resources for such period as its board may deem advisable;

(12) To make, enter into, and execute such contracts, agreements, leases, and other instruments and to take such other actions as may be necessary or convenient to accomplish any purpose for which such authority was organized or to exercise any power expressly granted under this chapter;

(15) To appoint, employ, and contract with such employees and agents, including, but not limited to, architects, engineers, attorneys, accountants, financial experts, fiscal agents, and such other advisors, consultants, and agents as may in its judgment be necessary or desirable, and to fix their compensations;

(16) To enter into a management contract or contracts with any municipality, any county, or any person or persons for the management, supervision, or operation of all or any part of its facilities as may in the judgment of such authority be necessary or desirable in order to perform more efficiently or economically any function for which it may become responsible in the exercise of the powers conferred upon it by this chapter;

(20) To do any and all things necessary or convenient to carry out its purposes and to exercise its powers pursuant to the provisions of this chapter.

Section 11-89A-15 – Outlines cooperation, aid, and agreements from and with other bodies as follows:

(a) For the purpose of attaining the objectives of this chapter, any county, municipality, or other political subdivision, public corporation, agency, or instrumentality of the state, a county or municipality may, upon such terms and with or without consideration, as it may determine, do any or all of the following:

(1) Lend or donate money to any authority or perform services for the benefit thereof;

(2) Donate, sell, convey, transfer, lease, or grant to any authority, without the necessity of authorization at any election of qualified voters, any property of any kind;

(3) Do any and all things, whether or not specifically authorized in this section, not otherwise prohibited by law, that are necessary or convenient to aid and cooperate with any authority in attaining the objectives of this chapter;

Section 11-89A-18 – Provides exemption from competitive bid laws.

Any authority and all contracts made by it shall be exempt from the laws of the State of Alabama requiring competitive bids for any contract to be entered into by municipalities or public corporations authorized by them, including, but without limitation to, the provisions of Article 3 of Chapter 16 of Title 41

RECOMMENDED GOALS FOR AUTHORITY

- I. Establish an *integrated solid waste management* program that leads to long-term cost containment and savings along with program sustainability by developing an independent organization that is innovative and responsive to

needs of the community. The Authority would provide comprehensive, cost-effective solid waste management in an environmentally sound manner, incorporating state-of-the-art methods and technology, and educating the public on responsible waste management.

- II. Develop and implement for the County a hierarchy for solid waste management options in the order of preference as follows:
 - a) Source Reduction and Reuse
 - b) Recycling and Composting
 - c) Energy Recovery
 - d) Treatment and Disposal

- III. Develop a solid waste management infrastructure to fill needs identified in the County's Solid Waste Management Plan that are underserved by the private sector (e.g. recycling, material recovery etc.). Such infrastructure could be developed or expanded so that it can serve a larger regional area.

- IV. Implement and provide accountability for the County Solid Waste Management Plan with particular emphasis in the areas of:
 - a. Illegal Dumping Prevention and Clean-up
 - b. Litter Prevention and Clean-up
 - c. Waste Minimization
 - d. Recycling
 - e. Community Education and Involvement
 - f. Coordinating solid waste management plan requirements for new and expanded solid waste management facilities with ADEM, other counties/cities and planning entities
 - g. Coordinating pollution prevention programs with ADEM and other agencies

AUTHORITY FORMATION STEPS AND RECOMMENDATIONS

STEPS TO FORMING AUTHORITY:

1. The Baldwin County Commission adopts an authorizing resolution to form the Solid Waste Disposal Authority of Baldwin County.
2. The Baldwin County Commission files for recording in the office of the judge of probate of Baldwin County a certificate of incorporation. Upon the filing for record of the said certificate of incorporation and the documents required, the authority shall come into existence and shall constitute a public corporation under the name set forth in said certificate of incorporation. The judge of probate is required to send a notice to the Secretary of State that the certificate of incorporation of the authority has been filed for record.
3. The Baldwin County Commission appoints the Authority Commissioners within 30 days of filing of incorporation agreement.
4. Authority Board of Commissioners adopts Authority Bylaws, rules and regulations. The Board will also make certain filings and registrations required to conduct business and distinguish itself as a new legal entity (e. g. filing for new tax identifications, etc.).
5. Authority Board of Commissioners shall make the business decisions of Authority.

AUTHORITY FORMATION RECOMMENDATIONS

EBS' recommendations for Baldwin County to form a Solid Waste Management Authority are as follows:

If the Baldwin County decides to form a solid waste authority, EBS recommends the Board to form a solid waste authority as follows:

1. Establish a new Solid Waste Disposal Authority pursuant to the Title 11-89A.
2. Form a single member Authority with Baldwin County Commission as the only member.
3. Appoint three (3) commissioners to the Authority with terms of no more than 6 years. The initial terms of the Commissioners should be staggered to allow for continuity of Authority actions and management.
4. Hire an executive director or general manager with the required qualifications to manage the creation and development of the Authority.
5. Fund Authority operations by providing residential collection service to Baldwin County unincorporated areas as well as providing MSW and C&D disposal facilities for a fee per ton to public and private entities in Baldwin County.
6. Allow Authority to initially contract with Baldwin County for support services (i.e. payroll, operation and administration). As the Authority grows it will develop its own support services. The Authority will pay the County a management fee for the provision of the support services.
7. Allow the Authority to possess all powers, authority and flexibility accorded to it by the Title 11-89A including the ability to issue bonds and develop projects.
8. The Authority Board and Executive Director should evaluate other Goals and Objectives that are common to other solid waste authorities.

SUGGESTED OBJECTIVES

After the formation of the Authority and appointment of the Authority Board Members and Executive Director, the Authority should develop a path forward that is guided by its goals and objectives. An outline of a recommended goals and objectives for the Authority's consideration is as follows:

Objective - Integrated System of Solid Waste Management: A comprehensive, *integrated system of solid waste management* developed and managed by a solid waste disposal authority can achieve the specific service, health and safety, financial, environmental and institutional objectives for Baldwin County and its citizens.

Strategies to achieve this objective:

- Develop the *integrated system of solid waste management* in a manner that brings maximum benefit and public service to the citizens of the service area as a whole.
- Establish and maintain an ongoing planning and plan implementation process to meet current and future needs for the service area based on the state's adopted hierarchy of waste management strategies.
- Develop and maintain a comprehensive business plan approach to solid waste management and the planning process for the Baldwin County service area that meets State/Federal regulations, fulfills regional and local needs and priorities, and outlines a schedule of accomplishments and implementation program.
- Designate the BC SWDA as the legal implementing entity for the County Solid Waste Management Plan and incorporate into the Plan mechanisms to provide the opportunity for regional coordination of local member

government solid waste management programs and activities under the County Solid Waste Management Plan.

- Designate specific responsibilities for the BC SWDA to implement programs and activities that meet the waste management needs and requirements of the County Solid Waste Management Plan.
- Be the responsible entity for broad, multi-governmental, long-range comprehensive planning and policy development.
- Provide intergovernmental procedures and processes to effectively implement and maintain the County Solid Waste Management Plan, including delineation of incremental stages toward meeting the regional solid waste management objectives and provisions for major updates that, at a minimum, meet all schedules for completion established by State regulations.
- Receive and record state required information on all closed, active or proposed solid waste disposal, treatment and storage facilities and collection systems;
- Collect, maintain and report data required to meet state regulations on source reduction activities and on the amount of solid waste of each type (residential, commercial and industrial, including principal and supplemental recyclable materials) generated, disposed, reused, recycled and exchanged within the service area;
- Provide for coordination among public and private sector solid waste management activities within the regional solid waste management planning process.

- Monitor legislative initiatives that would assist in meeting state planning regulations and waste management goals, or further the objectives of the Authority and local governments in regional waste management.
- Provide in the planning process an evaluation of the potential economic impacts on the private and public sectors of various regional solid waste management alternatives.
- Engage in continuous contact with the Solid Waste Management industry in the areas of emerging technology and solid waste management techniques, so that the BC SWDA members may have access to new industry developments and standards.
- Recognize the increased urbanization of the Baldwin County area and evaluate opportunities to provide waste management services to municipalities in the County as their service level needs are expanded.

Objective - Continuous Improvement of Services: To assist in meeting the solid waste management needs of the Baldwin County service area and its citizens in an efficient, cost-effective, reliable and equitable manner, while providing adequate flexibility in meeting changing needs and market conditions needs while integrating new and innovative processes.

Strategies to achieve this objective:

Support a regional solid waste management planning process, which is based on the EPA's hierarchy of strategies pursued in the following order of priority:

1. Source Reduction and Reuse
2. Recycling and Composting
3. Energy Recovery (formerly “combustion”)

4. Treatment and Disposal

- Maintain disposal capacity assurance for MSW and C&D disposal for Baldwin County and all of its municipalities at Authority owned or controlled landfills and in coordination with other public and private entities with landfills.
- Develop long-term waste stream flows to Authority owned or controlled solid waste processing and disposal facilities.
- Encourage and support organizations that coordinate, facilitate and promote local solid waste management efforts and provide leadership in establishing and administering regional recycling and disposal activities.
- Regularly evaluate and monitor the waste management facilities and systems within the service area, so as to maintain compliance with federal and state regulations and standards, regularly refine the systems and remedy problems, maximize the use of existing facilities, test new options and integrate workable innovations into the regional system.
- Develop, support and encourage public and private partnerships in meeting solid waste management needs.
- Promote and support private sector participation in meeting waste management needs; incorporate existing private recycling operations into long-term planning; and encourage expansion of private operations as practical, consistent with the objectives and policies of the Solid Waste Management Plan.
- Develop and promote intergovernmental solutions to meeting the service area's and local jurisdictions' solid waste management needs that are equitable in terms of sharing the costs, risks and benefits among local

jurisdictions and private sector waste management interests within the service area.

- Promote regional and local strategies that secure adequate public and private financial resources for meeting local and regional solid waste management needs.
- Provide or support an existing forum where municipal jurisdictions can have contact with adjoining localities, for the purpose of exploring additional opportunities to provide solid waste management programs in the most efficient manner.
- Continue to research and bring forth modern and innovative programs/systems for handling non-routine or emergency solid waste management needs.

Objective - Recycling Goals: To continue to meet or exceed the state mandated recycling goals for the Service Area.

Strategies to achieve this objective:

- Provide cost-effective mechanisms for the collection and disposal of residential solid waste as well as reuse, recycling and/or disposal of residential, commercial, and industrial solid waste and waste from other sources.
- Provide cost-effective mechanisms for the disposal or recycling/reuse of special wastes associated with unique disposal considerations, such as white goods, yard wastes, batteries, used tires, used motor oil, household hazardous wastes, stumps and land-clearing debris, construction debris, mining wastes, agricultural wastes, sludge, ash, inoperable vehicles and spill residues.

- Support local government in-house source reduction and recycling activities, as well as waste collection and disposal programs.
- Provide information to Baldwin County citizens and municipalities on alternative systems and techniques of recycling to reduce the amount of waste requiring disposal by other means.
- Promote efforts to achieve resource conservation and save landfill space.

Objective - Public Support: To secure maximum public support for the regional solid waste planning and implementation process through public participation and education programs.

Strategies to achieve this objective:

- Establish or support existing effective public education and information programs for schools, businesses and industries, public and private agencies and the general public.
- Coordinate solid waste management education and promotional programs with those of the local, state, other public and private agencies and industry.
- Become a resource for solid waste information for utilization by agencies, businesses, and the general public. Identify creative mechanisms for converting solid waste materials into goods for productive use for businesses or industries in the regional area.
- Reduce the improper disposal and littering of wastes through education, the involvement of volunteers, local governments, law enforcement, and other efforts. The Baldwin County Commission should authorize and empower the

Authority Executive Director to have the authority to enhance the County's illegal dumping program to the fullest extent allowed by law.

- In an effort to eliminate or prevent illegal dumping in Baldwin County, coordinate and contract when necessary with the appropriate regulatory entities.
- Identify alternatives in the planning process that cause the least environmental damage in terms of adverse ecosystem and habitat changes, and negative impacts on natural, historical, cultural, recreational, and aesthetic resources.

ECONOMICS

FUNDING

The capital needs for the authority should come from user fees (solid waste collection and disposal), grants, bond proceeds or other commercial sources. The method and structure of financing will be dependent on a variety of factors based on the final business plans developed by the Authority. The Authority revenues should come entirely from grants, user fees and proceeds from commodity sales. The Authority is an independent organization and solely responsible for its debts and expenses. The Authority should not be an entity reliant on County millage or other taxes.

CLOSING SUMMARY

Baldwin County Commission and the Baldwin County Solid Waste Department are to be commended on their accomplishments of providing citizens stable and reliable solid waste collection and disposal services at an economical cost. The next step for

Baldwin County would be to allow the solid waste management programs to reach another level toward their full potential by allowing the programs to optimize their existing strengths and assets. In order to facilitate this next step, the solid waste management programs need the ability to function more as a private company or business might operate especially in regard to long-term planning, contracting and development. From a business plan approach, a successful program is a program that:

- 1) meets or exceeds the needs and expectations of its customer base, and
- 2) involves a series of investments and returns of those investments that are both economically feasible and self-sustaining without additional tax revenues.

The Alabama Solid Waste Disposal Authority legislation provides an excellent tool for this purpose. It would allow the management of the solid waste programs to have the flexibility to adjust to ever changing market conditions like a private company but without the profit margin motivation plus the accountability of a public entity.

Advantages of a solid waste authority:

- Long-term low-cost provider of solid waste services
- Pricing stability long-term
- Capacity assurance long-term for MSW and C&D disposal volumes
- Development of an integrated system of waste collection, processing and disposal
- Ability to take advantage of cutting edge and innovative waste-to-energy (WTE) technologies that are economically unfeasible for Baldwin County by itself
- Continuous waste stream assurance for disposal and waste processing strategies and facilities.

- Accountability and empowerment to control community waste related programs such as illegal dumping
- Ability to take advantage of modern state-of-the-art technologies without reliance on the private sector
- Strengthen opportunities for solid waste related matching grants and loans by pooling revenue and spreading costs
- Development of sustainable recycling and processing services
- Uniform fees for authority customers
- Service motivated, not profit motivated
- Greater attention to pollution prevention programs (i.e. illegal dumping and anti-litter)

The future success of solid waste management in Baldwin County relies on the implementation of programs designed to minimize the County's dependence on disposal and to increase efforts to reduce, reuse and recycle. Without a change of focus to these areas, Baldwin County will continue to meet its solid waste management needs through disposal. To continue the long term viability of this path, significant increases in resources must be devoted to the regulatory oversight of both permitted landfills and to the closure of illegal solid waste dumps. Public education and political support at the County and municipal level is necessary for an emphasis on waste minimization, recycling and modern waste processing.