Final Report

Administrative & Technical Support in Evaluating Public Input on Potential Enhancements to the State Solid Waste Program

Phase I. Potential Enhancements to the Alabama Solid Waste Landfill Permitting Process

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Executive Summary

The Alabama Solid Waste (ASW) project is being conducted by Auburn University in response to Alabama law placing a moratorium on new solid waste landfill permits. Specifically, Act 2011-297, Bill H-406, placed a 24-month moratorium on the issuance of new permits to allow the Alabama Department of Environmental Management (ADEM) and the Alabama Department of Public Health (ADPH) sufficient time to review their responsibilities under the Solid Wastes and Recyclable Materials Management Act (SWRMMA) and for the update of the state's solid waste management needs. The Alabama legislature extended the moratorium for an additional 12 months through the passage of Act 2012-434, Bill H-556. This law extends the moratorium act to May, 2014.

The ASW project is a two-phased project. Phase I is primarily a study of the current Alabama solid waste landfill permitting process, while Phase II is primarily a study of potential alternative materials management approaches for minimizing solid waste disposal in Alabama landfills. This report addresses Phase I activities and results. Phase I activities included a number of public meetings and stakeholder dialogs to examine the current and potential future solid waste landfill permitting process, designed to provide ADEM with an assessment of (1) the public's perception of Alabama's current solid waste landfill permitting process; and (2) an assessment of potential enhancements to Alabama's solid waste landfill permitting process.

Phase I study results revealed that there are several advantages to the current solid waste landfill permitting process which make Alabama's methodology more efficient than those of other states. These advantages include speed, predictability, and separation of community planning decisions and regulatory decisions. Perceived disadvantages noted by the public include inadequate assessment of landfill need, inadequate early public and local engagement and information transfer, poor host government decision-making process transparency, inability of the Regional Planning Council's to address questions of consistency with regional solid waste management plans, and a default approval mechanism for the host government. Phase I results suggest that the advantages and perceived disadvantages of Alabama's current solid waste landfill permitting process can potentially be reconciled by making the following relatively straightforward changes: (1) change the 90-day default approval; (2) replace the RPC

as the entity assessing consistency of a proposal with the regional SWMP; and (3) require the applicant to provide fact-based information supporting their proposal to the public and to the host government authority prior to a host government authority decision.

Introduction

The recent era of solid waste stream management in Alabama began with Alabama Law 89-824, passed by the Alabama Legislature in 1989 (1). This law amended Alabama's Solid Waste Disposal Act through Article 3, which, among other things:

- Directed the Alabama Department of Environmental Management (ADEM) to prepare the Alabama Solid Waste Management Plan
- Directed Regional Planning & Development Commissions to develop regional solid waste management needs assessments
- Required local governments to prepare and adopt local Solid Waste Management Plans

The events which have occurred since the enactment of Alabama Law 89-824 are summarized in Figure 1. One of the significant outcomes of this law is the development of ADEM's Solid Waste Management Plan. The initial development of this plan was accomplished through a two-phase approach. Phase I provided guidance to local governments in development of local solid waste management plans, and included a statewide survey designed to estimate the amount of solid waste generated per person per day, as well as the make-up of this waste stream (2). Phase II refined previously gathered solid waste management data and recommended statutory improvements to Alabama's management of solid waste (3). In 2002, the Alabama Environmental Management Commission (EMC) adopted Phase I and Phase II of the Solid Waste Management Plan into ADEM's solid waste regulations. However, until 2008, only a portion of the recommendations in Phase II of the plan were adopted by the Alabama Legislature (specifically, the Alabama Scrap Tire Environmental Quality Act, passed by the Alabama Legislature in 2003).

In 2008, the Solid Wastes and Recyclable Materials Management Act (SWRMMA) was passed by the Alabama Legislature. This act considerably modernized the management of solid waste streams in Alabama, and included a number of the recommendations initially proposed in Phase II. Among other things, the bill instituted a statewide solid waste disposal fee (\$1.00 per ton). This fee provided revenue to establish the Solid Waste Fund (to pay costs associated with

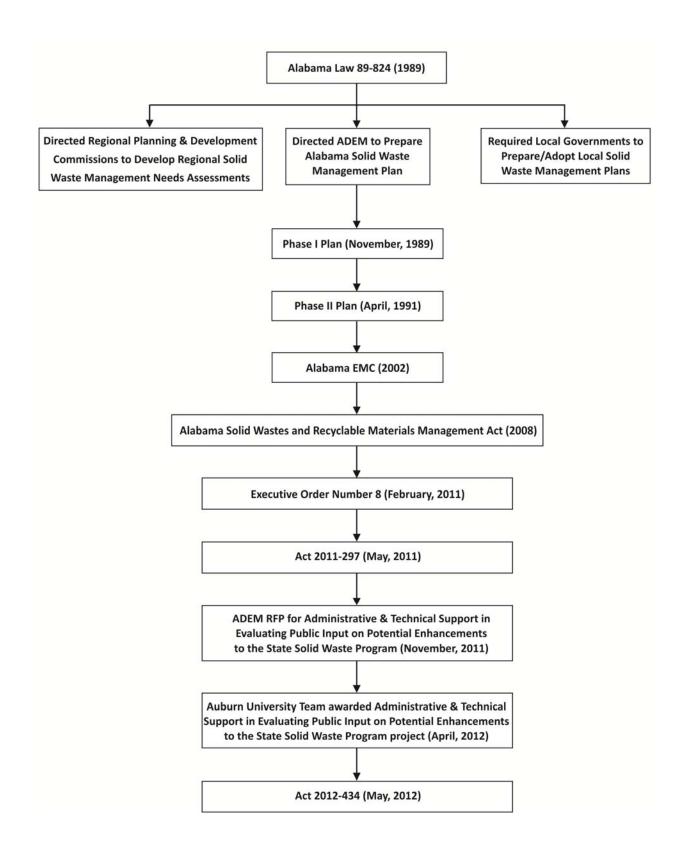


Figure 1. Summary of important events following enactment of Alabama Law 89-824.

remediation of unauthorized solid waste dump sites); and the Alabama Recycling Fund (to provide grants to local Alabama governments and non-profit organizations to develop and enhance recycling and waste minimization programs). Additionally, it provides funding to ADEM to both perform its solid waste management regulatory duties, and fund educational programs related to solid waste management and recycling. Also, it provides revenue to the state to cover the costs associated with collection of the fees (1).

In February, 2011, Governor Robert Bentley signed Executive Order Number 8, which directed ADEM (with input from the Alabama Solid Waste Management Advisory Committee and the Alabama Department of Public Health (ADPH)), to adopt and promulgate new rules, regulations, and requirements for the permitting of solid waste management facilities and landfills meeting certain size/capacity criteria (4). This order also required all solid waste management facilities be approved by the Alabama Solid Waste Management Advisory Committee. Importantly, the order imposed a moratorium on the issuance of new or modified permits (or the transfer of existing permits) for solid waste management facilities until the new rules, regulations, and requirements required by the order were promulgated.

Certain directives contained in Executive Order Number 8 were enacted into law in May of 2011 with the passage of Act 2011-297, Bill H-406, which specified a 24-month moratorium on the issuance of new permits (5). Act 2011-297 states that the purpose of this moratorium is to allow adequate time for ADEM and ADPH to review their responsibilities under the Solid Wastes and Recyclable Materials Management Act and for the update of the state's solid waste management needs (5).

In response to Act 2011-297, in November 2011, ADEM released the request for proposals (RFP) seeking administrative and technical support in evaluating public input on potential enhancements to the state solid waste program (6). In addition to the permitting of new landfills, ADEM's RFP sought insight regarding broader statutory and regulatory change in the overall management of solid waste in Alabama, including sustainable materials management practices. ADEM noted that as the acceptance and use of alternatives to landfill disposal

increases, Alabama's solid waste management program must adapt to this changing solid waste paradigm.

In April 2012, the Auburn University (AU) team was awarded a two-year grant to conduct the study requested in ADEM's November 2011 RFP (referred to as the Alabama Solid Waste (ASW) project). In this role, the AU team is providing technical support to ADEM in gathering and evaluating input from the general public, and solid waste management stakeholders (e.g., local governmental authorities, elected officials, solid waste industry representatives) regarding both landfill disposal and the increased use of alternatives to landfill disposal. Additionally, the AU team is serving in an advisory capacity to assist ADEM in developing and implementing programs to meet future solid waste management goals and challenges. This includes an evaluation of the current and potential future state of solid waste management practice in Alabama and other states, the gathering and evaluation of public and other stakeholder ideas, issues, and concerns; and the synthesis of this information into alternatives for further actions by ADEM, ADPH, and the Alabama Legislature.

Following the award of the ASW project to the AU team, the Alabama legislature extended the moratorium on the issuance of new or modified permits for an additional 12 months through the passage of Act 2012-434, Bill H-556 (7). This law extends the moratorium act to May, 2014.

Project Objectives

The ASW project is a two-phased project. Phase I is primarily a study of the current Alabama solid waste landfill permitting process, while Phase II is primarily a study of potential alternative materials management approaches for minimizing solid waste disposal in Alabama landfills. This report addresses Phase I activities and results. Phase I activities included a number of public meetings held throughout Alabama, designed to engage the broader public in a dialog regarding the current and potential future of both solid waste landfill permitting, and alternatives to landfilling solid waste in Alabama. More focused stakeholder dialogs were also included in Phase I activities, designed to engage those within the state who, through employment, political activities, or other means (for example, non-governmental environmental or social justice groups), are more familiar with the current solid waste landfill

permitting process, and also are more familiar with alternative solid waste management approaches. Additionally, Phase I activities included a review of the solid waste landfill permitting process in other states, for comparison with Alabama's current permitting process. The ultimate goal of Phase I is to provide ADEM with an assessment of (1) the public's perception of Alabama's current solid waste landfill permitting process; (2) an assessment of potential enhancements to Alabama's solid waste landfill permitting process.

Auburn University Study Team

The Auburn University study team is comprised of faculty and graduate students from the Samuel Ginn College of Engineering, Civil Engineering Department, and the College of Architecture, Design, and Construction (CADC).

Review of Alabama's Current Solid Waste Landfill Permitting Process

Permitting of solid waste landfills in Alabama is governed by the Code of Alabama, Title 22 (Health, Mental Health, and Environmental Control), Section 22-27-47 (Local plans required); and Section 22-27-48 (Implementation of plans), and the ADEM Administrative Code 335-13 (8). Sections 22-27-47 and 22-27-48 of the Code of Alabama define the authority and responsibility of the governing body of a county or municipality (referred to here as local host government) in which a new solid waste landfill is seeking to be established. Additionally, these sections of the Code of Alabama define the responsibility of the Regional Planning Commission (RPC) for the These authorities and region in which a new landfill is proposed to be established. responsibilities also apply to certain modifications of existing solid waste landfill permits; they do not apply to industrial landfills receiving wastes generated on site only or by the permittee. Importantly, these sections of the Code of Alabama establish a 'firewall' between the responsibilities and authorities of a local host government and the RPC, and ADEM. As a result of this firewall, the responsibilities of ADEM, as defined in ADEM Administrative Code 335-13, are limited to assessing technical engineering and operational issues. The Code of Alabama specifically states that ADEM may not consider a permit application for a new or modified permit for a solid waste facility unless the application has received approval by the affected local host government, and has also received a statement of consistency from the RPC. The RPC

is required to evaluate the landfill proposal, using the provisions of the current regional solid waste management plan, and determine whether the proposal is consistent or inconsistent with this regional plan. This statement of consistency by the RPC is non-binding on the local host government or ADEM (that is, an RPC statement of inconsistency does not require rejection of the permit application by the local host government or by ADEM); however, it is required prior to ADEM's review of a technical proposal.

A local host government must have a local solid waste management plan approved by ADEM before it can consider a new or modified solid waste landfill permit. Additionally, a local host government must consider six factors in determining whether to approve a permit application (8):

- (1) The consistency of the proposal with the jurisdiction's solid waste management need as identified in its plan;
- (2) The relationship of the proposal to local planned or existing development or the absence thereof, to major transportation arteries and to existing state primary and secondary roads;
- (3) The location of a proposed facility in relationship to existing industries in the state that generate large volumes of solid waste, or the relationship to the areas projected for development of industries that will generate solid waste;
- (4) Costs and availability of public services, facilities and improvements required to support a proposed facility and protect public health, safety and the environment;
- (5) The impact of a proposed facility on public safety and provisions made to minimize the impact on public health and safety; and
- (6) The social and economic impacts of a proposed facility on the affected community, including changes in property values, and social or community perception.

Further, the local host government is required to hold at least one public hearing (advertised in a local newspaper at least 30 days, but not more than 45 days prior to the public hearing) prior to determining whether to approve a permit application. If the local host government does not act on a proposal within 90 days of receiving the application, then the application is approved by default (Code of Alabama Section 22-27-48). Additionally, the permit applicant is not

required to obtain the RPC statement of consistency until after the local host government has approved the permit application (but prior to submitting an application to ADEM for technical review).

The current solid waste landfill permitting process discussed above is represented as a flowchart in Figure 2. A similar figure was used during all public meetings as a way of explaining the current permitting process, and to elicit comments and provoke discussion (discussed in sections which follow).

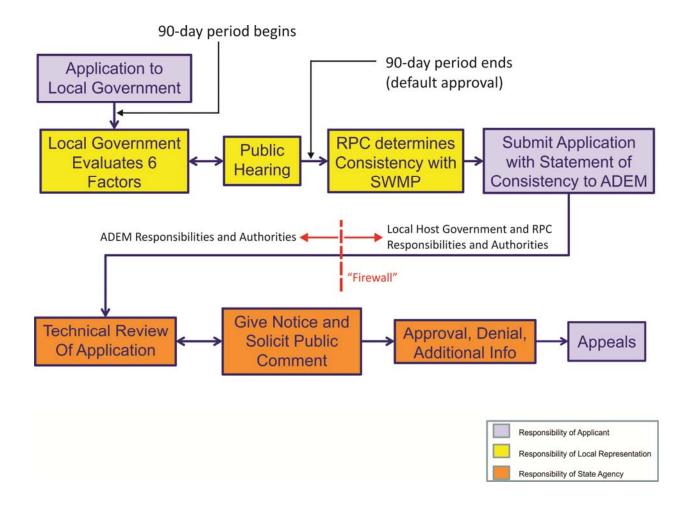


Figure 2. Flowchart representation of Alabama's current solid waste landfill permitting process.

Phase I Activities and Results

Public Meetings

<u>Locations</u>. Thirteen public meetings were held at locations throughout Alabama (Table 1). The locations were selected so that at least one public meeting would be held in each RPC district within the state. Two public meetings were held in RPC district 6 to accommodate anticipated higher levels of public interest in this project in this district.

Table 1. Meeting Number, Date, RPC Region, and Location of Public Meetings

Meeting	Date	Day	Time	Region	City	Venue
1	06/29/12	Friday	3-5pm	9	Montgomery	301 Columbus St. (Old Alabama Town Reception Center)
2	08/21/12	Tuesday	6-8pm	4	Anniston	Alabama Cooperative Extention Auditorium, 1702 Noble St # 108
3	08/23/12	Thursday	6-8pm	10	Auburn	Auburn University Student Center, 255 Heisman Dr., Ballroom B
4	10/10/12	Wednesday	3-5pm	8	Fairhope	Gulf Coast Research & Extension Center Auditorium, 8300 State Hwy 104
5	09/05/12	Wednesday	6-8pm	5	Troy	Pike County Cattlemenn's Association, 4200 U.S. 231 South, Troy, AL 36081
6	09/06/12	Thursday	6-8pm	12	Huntsville	Huntsville Marriott, 5 Tranquility Base, Huntsville, Discovery/Atlantis Room
7	09/18/12	Tuesday	6-8pm	6	Repton	Repton Junior High School, 2340 Conaly St., Repton
8	09/19/12	Wednesday	6-8pm	6	Uniontown	City of Uniontown, 100 Front St.
9	09/24/12	Monday	6-8pm	1	Florence	Marriott Shoals, 10 Hightower Place, Florence RoomConference Center
10	09/25/12	Tuesday	6-8pm	11	Decatur	Ingall's Pavillion, 802-A Wilson Street, Decatur
11	10/16/12	Tuesday	6-8pm	7	Dothan	ACES-Houston County, 1699 Ross Clark Circle, Ste. 4
12	11/12/12	Monday	6-8pm	2	Tuscaloosa	Tuscaloosa County Extension Auditorium, 2513 7th Street
13	11/13/12	Tuesday	6-8pm	3	Birmingham	Vulcan Park & Museum, 1701 Valley View Drive, Birmingham, 35209

Attendance. Attendance at the 13 public meetings is shown in Figure 3. Public meetings were advertised through direct outreach, newspaper announcements, radio public service announcements, interviews and news stories, news outlet websites, and the Auburn project website. Public meeting attendance was varied and this variability was likely a result of the level of public interest with respect to solid waste issues in the state. As shown in Figure 1, attendance at the Repton, Uniontown, and Auburn public meetings was high relative to the other public meetings, which is likely a consequence of heightened public interest in solid waste issues in these areas relative to other areas of the state.

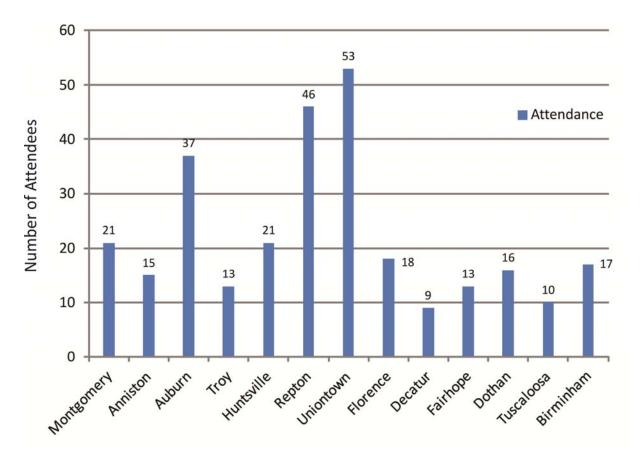


Figure 3. Attendance at public meetings.

<u>Meeting Style</u>. Each public meeting was conducted in a similar fashion. Attendees completed a sign-in sheet prior to the start of a meeting. The public meetings were conducted in charrette-style, with a brief introduction by the project team, followed by a short video presentation explaining the purpose and objectives of the study and the objectives of the meeting. After the

video presentation, meeting attendees were divided into roughly equal-sized groups, with a member of the project team joining each group. The team arranged the members of each group so that obvious friends and colleagues were separated into different discussion groups. In this way, the tendency for like-minded individuals to dominate a single discussion group was minimized. Each group then participated in a "table-top" discussion, moderated by the project team member, where issues related to the project objectives were discussed. A volunteer from each group recorded this dialog, and at the end of the discussion period summarized the results of the discussion with all meeting attendees. The project team member for each group also recorded their group discussion, which was archived by the project team for later use. At the conclusion of the meeting, a 2-page survey was distributed to the meeting attendees and collected by the project team.

<u>Surveys</u>. An example of the 2-page survey distributed to each meeting attendee is shown in Attachment 1. Survey questions were designed to gauge public perception and sentiment regarding Alabama's current solid waste landfill permitting process, potential enhancements to Alabama's solid waste landfill permitting process, and alternatives to landfilling solid waste. The surveys also request limited demographic information. The survey used during the first public meeting (Montgomery) differs slightly from the survey used at all other public meetings in that question 5 in the Montgomery survey was replaced in the post-Montgomery meeting surveys. This replacement followed after the project team decided the original question 5 was inconsistent with federal law regarding interstate commerce (9).

<u>Project Data</u>. Phase I project data are comprised of two general sets: (1) soft data consisting of summarized dialogs recorded by project team members during table-top discussions in public meetings, and (2) hard data from survey responses during public meetings. The survey dataset was compiled by considering each question on each completed survey. If the response to a particular survey question was incomplete, or if the response was provided in a way other than requested in the survey instructions, the response was rejected and not included in the survey dataset.

Summarized Public Meeting Dialogs

With respect to discussions during public meetings related to Alabama's current solid waste landfilling permit process, the majority of these discussions at all public meetings were remarkably similar, allowing the following trends to be identified:

- The assessment of landfill need is perceived by the public as inadequate
 - Local host government assessment of need (represented by the evaluation of six factors defined in §§ 22-27-48) is questionable
 - RPC process does not provide meaningful benefit to the process
 - Social justice concerns are not accommodated in the process
 - Consideration of potential environmental issues is not required by the local host government
- Public/local engagement and information transfer is perceived to be inadequate
 - Public notice process is thought to be inadequate
 - Public access to site suitability and needs assessment information is considered lacking
- Host government decision-making process is perceived as not transparent
- 90 day default "yes" rule is almost universally unpopular

It is important to emphasize that the trends noted above are the study team's assessment of the general sentiments expressed by attendees at the public meetings. Demographic information (presented below) support the statement that for the most part, public meeting attendees were generally well-educated and reasonably well-informed (with respect to solid waste landfilling issues). Moreover, a number of the public meeting attendees were citizens who work either directly in Alabama's waste management industry, or are affiliated in some enterprise or organization which requires knowledge of parts or all of Alabama's solid waste landfill permitting process. For example, members of RPC districts attended a number of public meetings, as did county commissioners, mayors, owners/operators/employees of landfills, etc. Thus, the trends identified above, although based on opinions and perceptions, should be considered as reasonable assessments of the current landfill permitting process.

Public Meeting Survey Results

Surveys completed by public meeting attendees are included in Attachment 2. An example of demographic information is shown in Table 2; all demographic information is tabulated in Attachment 3, and represented graphically in Figure 4. The demographic information provided by public meeting attendees generally indicate that most attendees were white, over the age of 60, relatively well-educated, and generally have high income. This is consistent with project team observations that public meeting attendance was motivated primarily by individual interest in solid waste landfilling issues and availability of personal time to attend the meetings.

Survey Question 1 Responses. Survey question 1 requests respondents rank what they consider to be the top three factors in siting a new landfill. Responses are summarized (as percent selected) in Tables 3-5. These results are also shown for individual meeting locations and as total (cumulative) meeting averages in Figures 5-11. Although there is some variability in individual meeting selections, cumulative averages support several trends: (1) the proximity to water sources and approval of local residents are the two most important factors; (2) the condition of a potential landfill site and the distance from home to a solid waste collection point are the next most important; (3) "other" aspects (defined below) are also important; and (4) adjacent land use and value, the impact of waste hauling vehicles (noise, traffic, road damage, etc.), and aesthetics are least important.

One of the selections to survey question 1 is the category "other." The respondent selecting this category was asked to specify their concern. The concerns noted by meeting attendees selecting the "other" category can be summarized as *location*, *need*, *political leadership*, *public health*, *environmental impact*, and *technical issues*. Table 6 summarizes the "other" category selections for each public meeting; Figure 12 shows the total number of "other" category selections for all meetings; and Figure 13 shows the "other" category selections for each public meeting. *Need* was the most significant concern for respondents selecting the "other" category. Respondents who were concerned with need were predominantly referring to the need for additional landfill capacity in a particular area which they perceived as already having sufficient capacity.

 Table 2. Example Demographic Information (from Montgomery Public Meeting)

Montgomery	1	2	3	4	5	6	7	8	9	10	11	12	13	14	т
Age	40	58	35	28	35	54	58	67	62	66		55	63		
20-29				х											1
30-39			х		х										2
40-49	х														1
50-59		х				х	х					х			4
60-69								х	х	х			х		4
>69															0
Gender															
Male	х	х	х	х	х	х	х	х				х	х		10
Female									х	х					2
Race															
White	х			х	х	х	х	х	х	х		х			9
Black		х													1
Other			х												1
Annual Income															
<15,000															0
15,000-29,999															0
30,000-44,999				х											1
45,000-59,000			х												1
60,000-74,999		х											х		2
75,000-89,999															0
>90,000	х				х	х	х		х	х		х			7
Highest Attained Education															
Grade school or less															0
Some high school															0
High school graduate															0
Some college or trade school		х					х		х						3
College graduate					х										1
Post-graduate	х		х	х		х				х		х	х		7

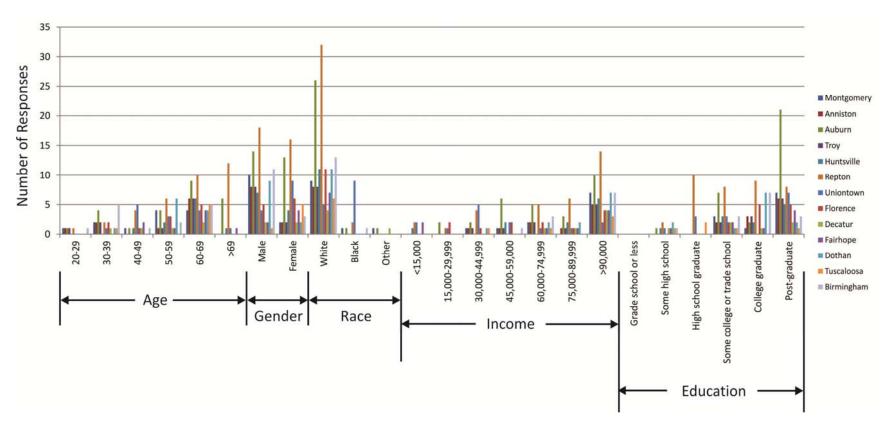


Figure 4. Demographic information from all public meetings.

Table 3. First Selection Response to Survey Question 1

Please rank what you consider to be the top 3 factors in siting a new landfill (1 being most important)

Factors	Mont	gomery	Ann	iston	Aul	burn	Tr	оу	Hunt	sville	Rep	oton	Unio	ntown	Flore	ence
Distance from solid waste collection areas to your home	1	7%	3	27%	2	6%	1	13%	1	8%	2	5%	9	47%	0	0%
Condition of existing site	0	0%	2	18%	2	6%	3	38%	3	25%	1	3%	0	0%	2	17%
Adjacent land use	0	0%	1	9%	1	3%	0	0%	1	8%	0	0%	0	0%	1	8%
Adjacent land value	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Approval of local residents	4	29%	2	18%	8	26%	0	0%	2	17%	17	46%	8	42%	2	17%
Proximity to water sources	3	21%	1	9%	16	52%	2	25%	2	17%	14	38%	0	0%	4	33%
Impacts of waste hauling vehicles	2	14%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	17%
Aesthetics	0	0%	0	0%	0	0%	0	0%	1	8%	0	0%	1	5%	0	0%
Other	4	29%	2	18%	2	6%	2	25%	2	17%	3	8%	1	5%	1	8%
Total	14	100%	11	100%	31	100%	8	100%	12	100%	37	100%	19	100%	12	100%
	•															
factors	Dec	atur	Fair	hope	Dot	than	Tusca	aloosa	Birmi	ngham	To	tal	Per	cent		
factors Distance from solid waste collection areas to your home	Dec	oatur	Fair 2	hope 25%	Dot	17%	Tusca 0	aloosa 0%	Birmii 0	ngham 0%		ital		cent 2%	•	
				·							2		12		,	
Distance from solid waste collection areas to your home	0	0%	2	25%	2	17%	0	0%	0	0%	2	3	12	2%		
Distance from solid waste collection areas to your home Condition of existing site	0	0% 50%	2	25%	2	17% 17%	0	0% 17%	0	0% 7%	2	.0	10	2%		
Distance from solid waste collection areas to your home Condition of existing site Adjacent land use	0 3 0	0% 50% 0%	0 0	25% 0% 0%	2 2 0	17% 17% 0%	0 1 0	0% 17% 0%	0 1 0	0% 7% 0%	2	0	12 10 2	2% 0% %		
Distance from solid waste collection areas to your home Condition of existing site Adjacent land use Adjacent land value	0 3 0	0% 50% 0%	2 0 0	25% 0% 0%	2 2 0 1	17% 17% 0% 8%	0 1 0	0% 17% 0% 0%	0 1 0	0% 7% 0%	2	0 4	12 10 2 1	2% 0% %		
Distance from solid waste collection areas to your home Condition of existing site Adjacent land use Adjacent land value Approval of local residents	0 3 0 0 3	0% 50% 0% 0% 50%	2 0 0 0	25% 0% 0% 0% 0% 25%	2 2 0 1	17% 17% 0% 8% 17%	0 1 0 0	0% 17% 0% 0% 50%	0 1 0 0	0% 7% 0% 0% 7%	2 2 	1004	12 10 2 1 28 32	2% 0% % %		
Distance from solid waste collection areas to your home Condition of existing site Adjacent land use Adjacent land value Approval of local residents Proximity to water sources	0 3 0 0 3	0% 50% 0% 0% 50%	2 0 0 0 2 4	25% 0% 0% 0% 25% 50%	2 2 0 1 2 5	17% 17% 0% 8% 17% 42%	0 1 0 0 3	0% 17% 0% 0% 50%	0 1 0 0 1 9	0% 7% 0% 0% 7% 60%	2 2 5 6	1 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	112 10 22 11 28 32	2% 0% % % 83%		
Distance from solid waste collection areas to your home Condition of existing site Adjacent land use Adjacent land value Approval of local residents Proximity to water sources Impacts of waste hauling vehicles	0 3 0 0 3 0	0% 50% 0% 0% 50% 0%	2 0 0 0 2 4	25% 0% 0% 0% 25% 50%	2 2 0 1 2 5	17% 17% 0% 8% 17% 42% 0%	0 1 0 0 3 1	0% 17% 0% 0% 50% 17%	0 1 0 0 1 9	0% 7% 0% 0% 7% 60%	2 2 2	3 0 4 1 4 4 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4	112 10 22 11 28 32 2	2% 0% % % %		

Table 4. Second Selection Response to Survey Question 1

Please rank what you consider to be the top 3 factors in siting a new landfill (1 being most important)

Factors	Mont	gomery	Ann	iston	Aul	ourn	Tr	оу	Hunt	tsville	Rep	oton	Unio	ntown	Flor	ence
Distance from solid waste collection areas to your home	1	7%	0	0%	1	3%	0	0%	0	0%	2	5%	2	11%	0	0%
Condition of existing site	3	21%	2	18%	6	19%	4	50%	1	8%	6	16%	4	21%	1	8%
Adjacent land use	1	7%	1	9%	2	6%	0	0%	1	8%	3	8%	2	11%	4	33%
Adjacent land value	2	14%	0	0%	0	0%	0	0%	2	17%	3	8%	1	5%	0	0%
Approval of local residents	0	0%	2	18%	11	35%	2	25%	1	8%	4	11%	1	5%	2	17%
Proximity to water sources	3	21%	4	36%	9	29%	2	25%	3	25%	15	41%	4	21%	4	33%
Impacts of waste hauling vehicles	3	21%	2	18%	1	3%	0	0%	2	17%	1	3%	2	11%	0	0%
Aesthetics	0	0%	0	0%	0	0%	0	0%	1	8%	2	5%	1	5%	1	8%
Other	1	7%	0	0%	1	3%	0	0%	1	8%	1	3%	2	11%	0	0%
Total	14	100%	11	100%	31	100%	8	100%	12	100%	37	100%	19	100%	12	100%
Factors	Dec	atur	Fair	hope	Dot	than	Tusca	aloosa	Birmi	ngham	To	otal	Per	cent		
Factors Distance from solid waste collection areas to your home	Dec	oatur 0%	Fair 0	hope 0%	Dot 0	than 0%	Tusca 0	oloosa 0%	Birmi 0	ngham 0%		otal 6		cent		
													3			
Distance from solid waste collection areas to your home	0	0%	0	0%	0	0%	0	0%	0	0%	3	6	3	%		
Distance from solid waste collection areas to your home Condition of existing site	0	0% 17%	0	0%	0	0% 8%	0	0% 17%	0 6	0%	3	6	3 19 8	9%		
Distance from solid waste collection areas to your home Condition of existing site Adjacent land use	0 1 0	0% 17% 0%	0 1 0	0% 13% 0%	0 1 0	0% 8% 0%	0 1 0	0% 17% 0%	0 6 1	0% 40% 7%	3 1	6 87 .5	3 19 8 7	% 9% :%		
Distance from solid waste collection areas to your home Condition of existing site Adjacent land use Adjacent land value	0 1 0 0	0% 17% 0%	0 1 0 1	0% 13% 0% 13%	0 1 0 3	0% 8% 0% 25%	0 1 0	0% 17% 0% 0%	0 6 1 1	0% 40% 7% 7%	3 1 1	6 37 .5	3 19 8 7	% 9% %		
Distance from solid waste collection areas to your home Condition of existing site Adjacent land use Adjacent land value Approval of local residents	0 1 0 0	0% 17% 0% 0% 17%	0 1 0 1 3	0% 13% 0% 13% 38%	0 1 0 3	0% 8% 0% 25% 33%	0 1 0 0	0% 17% 0% 0%	0 6 1 1	0% 40% 7% 7% 20%	3 1 1 3 5	6 .5 .3 .3 .4	3 19 8 7 18 33	% 9% % %		
Distance from solid waste collection areas to your home Condition of existing site Adjacent land use Adjacent land value Approval of local residents Proximity to water sources	0 1 0 0 1 4	0% 17% 0% 0% 17% 67%	0 1 0 1 3 3	0% 13% 0% 13% 38% 38%	0 1 0 3 4 2	0% 8% 0% 25% 33% 17%	0 1 0 0 0 0	0% 17% 0% 0% 0% 83%	0 6 1 1 3	0% 40% 7% 7% 20%	3 1 1 3 5	6 .5 .3 .44	3 19 8 7 18 33	% 9% 9% 9% 9% 9% 9% 9% 9% 9% 9% 9% 9% 9%		
Distance from solid waste collection areas to your home Condition of existing site Adjacent land use Adjacent land value Approval of local residents Proximity to water sources Impacts of waste hauling vehicles	0 1 0 0 1 4	0% 17% 0% 0% 17% 67%	0 1 0 1 3 3	0% 13% 0% 13% 38% 38%	0 1 0 3 4 2	0% 8% 0% 25% 33% 17%	0 1 0 0 0 5	0% 17% 0% 0% 0% 83%	0 6 1 1 3 1	0% 40% 7% 7% 20% 7%	3 1 1 3 5	6 5 3 3 4 9 5	319 88 77 18 33 88	% 9% % % 88% 11%		

Table 5. Third Selection Response to Survey Question 1

Please rank what you consider to be the top 3 factors in siting a new landfill (1 being most important)

Factors	Mont	gomery	Ann	iston	Aul	burn	Tr	тоу	Hunt	tsville	Rep	oton	Unio	ntown	Flor	ence
Distance from solid waste collection areas to your home	1	7%	0	0%	2	6%	1	13%	1	8%	2	5%	0	0%	1	8%
Condition of existing site	4	29%	3	27%	8	26%	1	13%	4	33%	10	27%	2	11%	3	25%
Adjacent land use	1	7%	2	18%	5	16%	1	13%	4	33%	5	14%	1	5%	0	0%
Adjacent land value	3	21%	1	9%	2	6%	0	0%	0	0%	2	5%	2	11%	0	0%
Approval of local residents	3	21%	2	18%	5	16%	0	0%	0	0%	6	16%	0	0%	3	25%
Proximity to water sources	1	7%	1	9%	4	13%	3	38%	1	8%	4	11%	5	26%	2	17%
Impacts of waste hauling vehicles	0	0%	1	9%	3	10%	1	13%	1	8%	1	3%	5	26%	1	8%
Aesthetics	0	0%	1	9%	1	3%	1	13%	0	0%	3	8%	4	21%	2	17%
Other	1	7%	0	0%	1	3%	0	0%	1	8%	4	11%	0	0%	0	0%
Total	14	100%	11	100%	31	100%	8	100%	12	100%	37	100%	19	100%	12	100%
Factors	Dec	atur	Fair	hope	Dot	than	Tusca	aloosa	Birmi	ngham	To	otal	Per	cent		
Factors Distance from solid waste collection areas to your home	Dec	oatur 0%	Fair 0	hope 0%	Dot 0	than 0%	Tusca 0	aloosa 0%	Birmii 1	ngham 7%		otal 9		cent %		
				ı .							9		5			
Distance from solid waste collection areas to your home	0	0%	0	0%	0	0%	0	0%	1	7%	4	9	5	%		
Distance from solid waste collection areas to your home Condition of existing site	0 2	0% 33%	0 4	0%	0	0% 8%	0 2	0% 33%	1 5	7%	4	9	20	% 5%		
Distance from solid waste collection areas to your home Condition of existing site Adjacent land use	0 2 0	0% 33% 0%	0 4 0	0% 50% 0%	0 1 1	0% 8% 8%	0 2 0	0% 33% 0%	1 5 2	7% 33% 13%	4 2	9	5 20 1:	% 5% 2%		
Distance from solid waste collection areas to your home Condition of existing site Adjacent land use Adjacent land value	0 2 0 0	0% 33% 0% 0%	0 4 0 2	0% 50% 0% 25%	0 1 1 2	0% 8% 8% 17%	0 2 0 0	0% 33% 0% 0%	1 5 2 0	7% 33% 13% 0%	1 3	9 22 4	5 20 1: 7	% 5% 2%		
Distance from solid waste collection areas to your home Condition of existing site Adjacent land use Adjacent land value Approval of local residents	0 2 0 0	0% 33% 0% 0%	0 4 0 2	0% 50% 0% 25% 13%	0 1 1 2 5	0% 8% 8% 17% 42%	0 2 0 0	0% 33% 0% 0% 33%	1 5 2 0	7% 33% 13% 0% 20%	4 2 1 3 2	9 22 4 30	5 20 11 7 10	% 5% 2% %		
Distance from solid waste collection areas to your home Condition of existing site Adjacent land use Adjacent land value Approval of local residents Proximity to water sources	0 2 0 0 0	0% 33% 0% 0% 0% 17%	0 4 0 2 1	0% 50% 0% 25% 13%	0 1 1 2 5	0% 8% 8% 17% 42%	0 2 0 0 2	0% 33% 0% 0% 33% 0%	1 5 2 0 3	7% 33% 13% 0% 20%	1 2 1 3 2 1	9 22 4 30 24	55 20 11 7 10 13	% 5% 2% % 5%		
Distance from solid waste collection areas to your home Condition of existing site Adjacent land use Adjacent land value Approval of local residents Proximity to water sources Impacts of waste hauling vehicles	0 2 0 0 0 0	0% 33% 0% 0% 0% 17%	0 4 0 2 1 1	0% 50% 0% 25% 13% 13%	0 1 1 2 5 0	0% 8% 8% 17% 42% 0%	0 2 0 0 2 0 1	0% 33% 0% 0% 33% 0% 17%	1 5 2 0 3 1	7% 33% 13% 0% 20% 7%	4 2 1 3 2 1 1	9 19 19 14 14 17 17 17 17 17 17 17 17 17 17 17 17 17	55 20 13 7 10 13 9 9	% 5% 2% % 5% 3%		

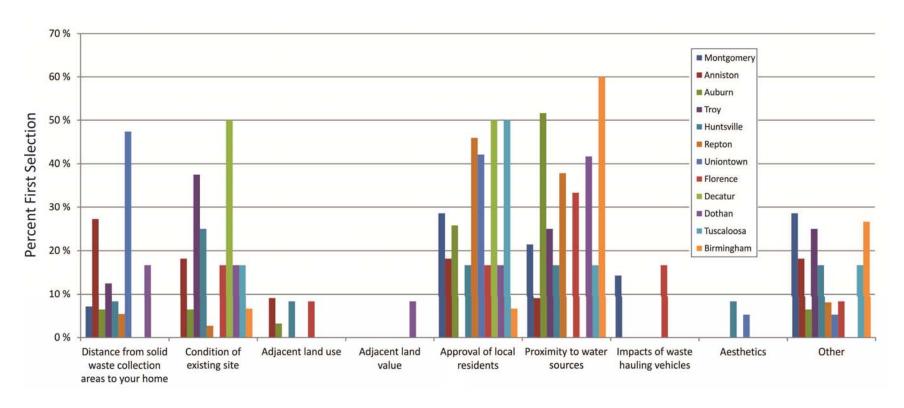


Figure 5. First selection response to survey question 1 for all public meetings.

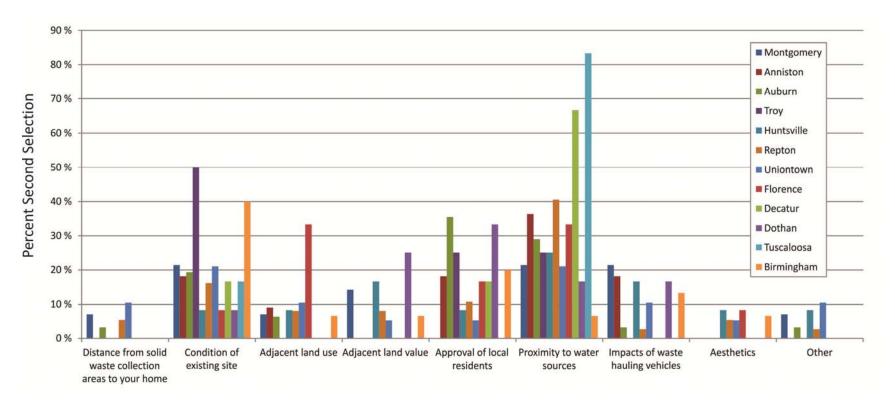


Figure 6. Second selection response to survey question 1 for all public meetings.

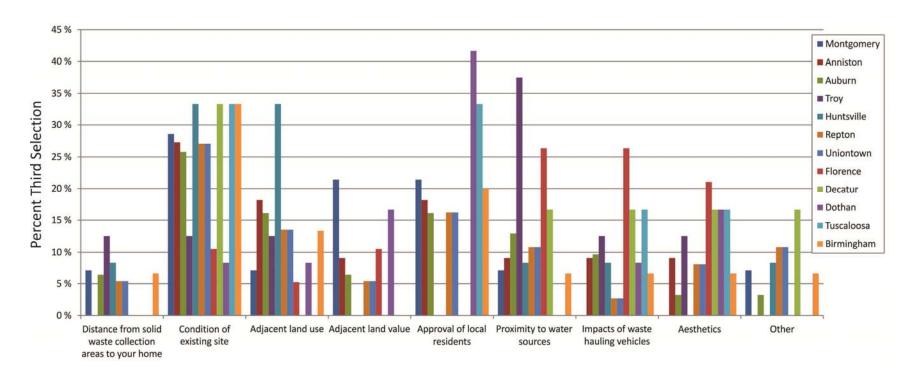


Figure 7. Third selection response to survey question 1 for all public meetings.

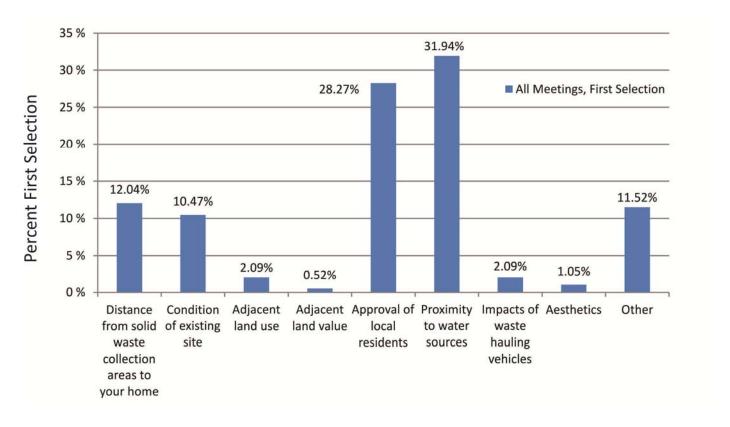


Figure 8. Cumulative percent first selection for question 1 for all meetings.

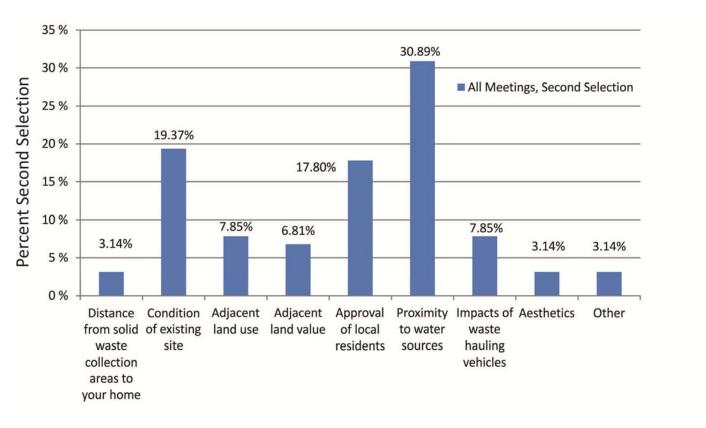


Figure 9. Cumulative percent second selection for question 1 for all meetings.

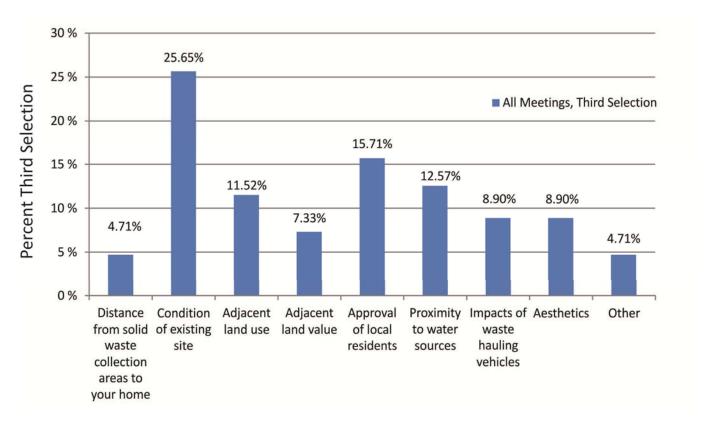


Figure 10. Cumulative percent third selection for question 1 for all meetings.

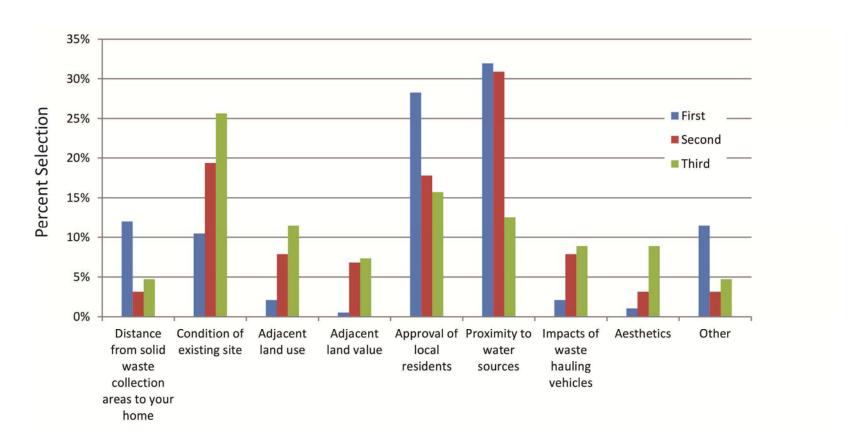


Figure 11. Cumulative percent all selections for question 1 for all meetings.

Table 6. Responses to "Other" Category Provided by Public Meeting Attendees

Other	Montgomery	Anniston	Auburn	Troy	Huntsville	Repton	Uniontown
Location	1	0	0	1	0	0	3
Need	3	2	2	1	3	6	0
Political leadership	1	0	0	0	0	0	0
Public health	1	0	0	0	0	0	0
Environmental impact	0	0	0	0	0	1	0
Technicalissues	0	0	2	0	1	0	1
Other	Florence	Decautur	Fairhope	Dothan	Tuscaloosa	Birmingham	Total
Other Location	Florence 0	Decautur 0	Fairhope 0	Dothan 0	Tuscaloosa 0	Birmingham 0	Total 5
			•				
Location	0	0	0	0	0	0	5
Location Need	0 1	0 1	0	0	0	0 5	5 25
Location Need Political leadership	0 1 0	0 1 0	0 0	0 0 0	0 1 0	0 5 0	5 25 1

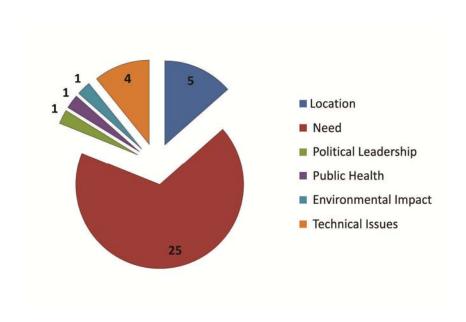


Figure 12. All responses to "Other" category provided by public meeting attendees.

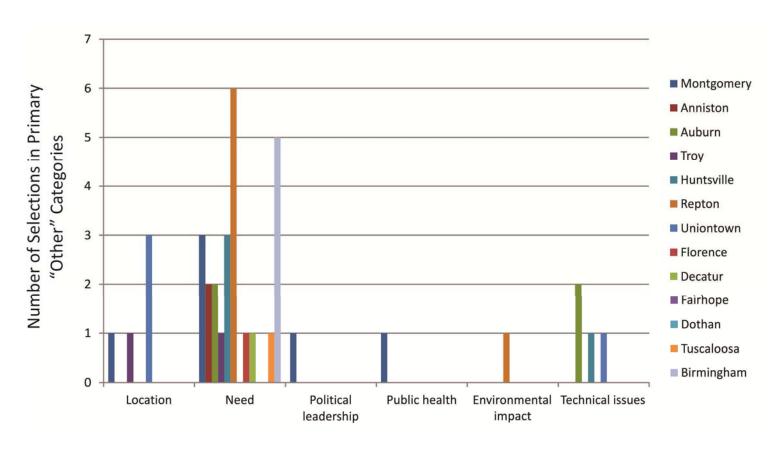


Figure 13. Responses to "Other" category from each public meeting.

<u>Survey Question 2 Responses</u>. Survey question 2 requests respondents rank what they consider to be the top three concerns regarding existing landfills. Responses are summarized (as percent selected) in Tables 7-9. These results are also shown for individual meeting locations and as total (cumulative) meeting averages in Figures 14-20. There is some variability in individual meeting selections; however, it is clear that the impact to water quality and sanitary conditions (loose trash, air quality, insects, vermin, etc.) are the most important concerns noted by public meeting attendees. Aesthetics (visual, odor, etc.), reduction in property values, and loss of wildlife habitat are the second most important concerns. Changes to landscape, loss of productive farmland, and traffic concerns are somewhat important; noise is considered least important. Similar to survey question 1, survey question 2 provided an "other" category where respondents could specify other concerns not explicitly noted in the survey question. However, the "other" category was not chosen by any public meeting attendees.

<u>Survey Question 3 Responses</u>. Survey question 3 asked respondents where they get information regarding landfill issues. Responses are summarized in Table 10. Results are also shown for individual meeting locations and as total (cumulative) meeting averages in Figures 21-22. Newspapers and public meetings were noted as the venue where most public meeting attendees obtained landfill-related information. Television, websites, and local community leaders were also cited as common venues for landfill-related information. Interestingly, family members and mailed cards and newsletters were less often cited as common venues for landfill-related information. A category for "other" was included with this question; however, most of the respondents who selected this category did not include a description of these other sources of information.

<u>Survey Question 4 Responses</u>. Survey question 4 asked respondents how they thought public opinion and technical recommendations should be balanced in siting new landfills. Responses are summarized in Table 11. Results are also shown as cumulative percent for all meetings in Figure 23. Most public meeting respondents thought public opinion should be considered equally with scientific or technical recommendations (approximately 60%). Those respondents who thought public opinion should be the most important factor (approximately 19%) and

 Table 7. First Selection Response to Survey Question 2

Please rank your top 3 concerns regarding existing landfills (1 being most important)

Location	Mont	gomery	Ann	iston	Aul	ourn	Tr	oy	Hunt	sville	Rep	ton	Unio	ntown	Flore	ence
Change to landscape	1	8%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Noise	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Sanitary conditions	3	23%	3	30%	4	14%	3	33%	5	45%	5	16%	5	28%	2	17%
Traffic	0	0%	1	10%	1	3%	0	0%	0	0%	0	0%	1	6%	0	0%
Reduction in property value	1	8%	1	10%	2	7%	0	0%	0	0%	1	3%	1	6%	0	0%
Impact to water quality	7	54%	5	50%	21	72%	5	56%	4	36%	24	75%	5	28%	9	75%
Loss of wildlife habitat	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Loss of productive farmland	0	0%	0	0%	0	0%	0	0%	1	9%	0	0%	0	0%	0	0%
Aesthetics	0	0%	0	0%	0	0%	1	11%	0	0%	1	3%	3	17%	1	8%
Other	1	8%	0	0%	1	3%	0	0%	1	9%	1	3%	3	17%	0	0%
Total	13	100%	10	100%	29	100%	9	100%	11	100%	32	100%	18	100%	12	100%
Location	Dec	atur	Fair	hope	Dot	:han	Tusca	aloosa	Birmiı	ngham	То	tal	Per	cent	ı	
Location Change to landscape	Dec	catur 0%	Fair	hope 0%	Dot 0	han 0%	Tusca 0	aloosa 0%	Birmii 0	ngham 0%	To	-		cent		
												l	1			
Change to landscape	0	0%	0	0%	0	0%	0	0%	0	0%	1	L	1	%		
Change to landscape Noise	0	0%	0	0%	0	0%	0	0%	0	0% 8%	1	l L	1 23	%		
Change to landscape Noise Sanitary conditions	0 0 3	0% 0% 50%	0 0 2	0% 0% 25%	0 0 3	0% 0% 25%	0 0	0% 0% 0%	0 1 3	0% 8% 23%	1 4	l L	1 1 2:	% % 3%		
Change to landscape Noise Sanitary conditions Traffic	0 0 3 0	0% 0% 50%	0 0 2 0	0% 0% 25%	0 0 3 0	0% 0% 25% 0%	0 0 0 0	0% 0% 0% 0%	0 1 3 1	0% 8% 23% 8%	1 4	1 1 0	1 1 23 2 6	% % 3% %		
Change to landscape Noise Sanitary conditions Traffic Reduction in property value	0 0 3 0	0% 0% 50% 0%	0 0 2 0	0% 0% 25% 0% 13%	0 0 3 0	0% 0% 25% 0% 17%	0 0 0 0	0% 0% 0% 0% 0%	0 1 3 1	0% 8% 23% 8%	1 4 4 1 10	1 1 0	1 1 23 2 6 58	% % 3% %		
Change to landscape Noise Sanitary conditions Traffic Reduction in property value Impact to water quality	0 0 3 0 0 3	0% 0% 50% 0% 0% 50%	0 0 2 0 1 5	0% 0% 25% 0% 13% 63%	0 0 3 0 2 7	0% 0% 25% 0% 17% 58%	0 0 0 0 0	0% 0% 0% 0% 0% 100%	0 1 3 1 1	0% 8% 23% 8% 8% 31%	1 4 4 1 10	1 1 1 0 0 0 0 4 1	1 1 23 2 6 58	% % 3% % %		
Change to landscape Noise Sanitary conditions Traffic Reduction in property value Impact to water quality Loss of wildlife habitat	0 0 3 0 0 3	0% 0% 50% 0% 0% 50%	0 0 2 0 1 5	0% 0% 25% 0% 13% 63%	0 0 3 0 2 7	0% 0% 25% 0% 17% 58%	0 0 0 0 0 5	0% 0% 0% 0% 0% 100%	0 1 3 1 1 4	0% 8% 23% 8% 8% 31%	11 4 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 0 0 0 0 4 1	1 1 23 2 6 58 1 1	% % 8% % 8%		
Change to landscape Noise Sanitary conditions Traffic Reduction in property value Impact to water quality Loss of wildlife habitat Loss of productive farmland	0 0 3 0 0 3 0	0% 0% 50% 0% 0% 50% 0% 50%	0 0 2 0 1 5 0	0% 0% 25% 0% 13% 63% 0%	0 0 3 0 2 7 0	0% 0% 25% 0% 17% 58% 0%	0 0 0 0 0 5 0	0% 0% 0% 0% 0% 100% 0%	0 1 3 1 1 4 1	0% 8% 23% 8% 8% 31% 8%	11 4 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 04	1 1 23 2 6 58 1 1	% % 83% % % 83% %		

Table 8. Second Selection to Survey Question 2

Please rank your top 3 concerns regarding existing landfills (1 being most important)

Location	Monte	gomery	Ann	iston	Aul	burn	Tr	оу	Hunt	tsville	Rep	oton	Unio	ntown	Flor	ence
Change to landscape	0	0%	0	0%	2	7%	0	0%	0	0%	2	6%	0	0%	0	0%
Noise	1	8%	0	0%	1	3%	1	11%	0	0%	0	0%	1	6%	1	8%
Sanitary conditions	3	23%	2	20%	10	34%	2	22%	2	18%	14	44%	2	11%	5	42%
Traffic	1	8%	0	0%	2	7%	0	0%	0	0%	0	0%	2	11%	0	0%
Reduction in property value	3	23%	4	40%	5	17%	1	11%	3	27%	2	6%	4	22%	0	0%
Impact to water quality	1	8%	2	20%	3	10%	4	44%	2	18%	7	22%	4	22%	1	8%
Loss of wildlife habitat	2	15%	1	10%	4	14%	0	0%	1	9%	5	16%	2	11%	2	17%
Loss of productive farmland	0	0%	0	0%	2	7%	0	0%	0	0%	1	3%	1	6%	0	0%
Aesthetics	2	15%	1	10%	0	0%	0	0%	3	27%	1	3%	2	11%	3	25%
Other	0	0%	0	0%	0	0%	1	11%	0	0%	0	0%	0	0%	0	0%
Total	13	100%	10	100%	29	100%	9	100%	11	100%	32	100%	18	100%	12	100%
Location	Dec	atur	Fair	hope	Dot	than	Tusca	aloosa	Birmi	ngham	То	tal	Per	cent		
Location Change to landscape	Dec	ow 0%	Fair	hope 0%	Dot 0	than 0%	Tusca 0	aloosa 0%	Birmii 0	ngham 0%		ital 4		cent	ı	
											4		2		•	
Change to landscape	0	0%	0	0%	0	0%	0	0%	0	0%	,	4	2	:%	•	
Change to landscape Noise	0	0%	0	0%	0	0%	0	0%	0	0% 8%	5	4	33	%		
Change to landscape Noise Sanitary conditions	0 0 2	0% 0% 33%	0 0 4	0% 0% 50%	0 0 5	0% 0% 42%	0 0 3	0% 0% 60%	0 1 5	0% 8% 38%	5	4 5 9	33	%		
Change to landscape Noise Sanitary conditions Traffic	0 0 2 0	0% 0% 33% 0%	0 0 4 0	0% 0% 50%	0 0 5 0	0% 0% 42% 0%	0 0 3 0	0% 0% 60%	0 1 5	0% 8% 38% 0%	55	4 5 9	33333	% % 3%		
Change to landscape Noise Sanitary conditions Traffic Reduction in property value	0 0 2 0	0% 0% 33% 0%	0 0 4 0	0% 0% 50% 0% 25%	0 0 5 0 3	0% 0% 42% 0% 25%	0 0 3 0	0% 0% 60% 0% 20%	0 1 5 0 2	0% 8% 38% 0% 15%	55	4 5 9 5 0	2 3 33 3 11	% % 3% %		
Change to landscape Noise Sanitary conditions Traffic Reduction in property value Impact to water quality	0 0 2 0 0	0% 0% 33% 0% 0% 33%	0 0 4 0 2 2	0% 0% 50% 0% 25%	0 0 5 0 3 3	0% 0% 42% 0% 25%	0 0 3 0 1	0% 0% 60% 0% 20%	0 1 5 0 2 3	0% 8% 38% 0% 15% 23%	5 5 3 3 3	4 9 5 0 4	22 33 33 31 11 19	% % 3% % 7%		
Change to landscape Noise Sanitary conditions Traffic Reduction in property value Impact to water quality Loss of wildlife habitat	0 0 2 0 0 2 1	0% 0% 33% 0% 0% 33% 17%	0 0 4 0 2 2	0% 0% 50% 0% 25% 25%	0 0 5 0 3 3	0% 0% 42% 0% 25% 25%	0 0 3 0 1 0	0% 0% 60% 0% 20% 0%	0 1 5 0 2 3	0% 8% 38% 0% 15% 23%	33 33 22	9 5 0 4	2 3 3 3 3 11 19 11 2	% % % % % % % % 1%		
Change to landscape Noise Sanitary conditions Traffic Reduction in property value Impact to water quality Loss of wildlife habitat Loss of productive farmland	0 0 2 0 0 2 1	0% 0% 33% 0% 0% 33% 17%	0 0 4 0 2 2 0	0% 0% 50% 0% 25% 25% 0%	0 0 5 0 3 3 0	0% 0% 42% 0% 25% 25% 0%	0 0 3 0 1 0 1	0% 0% 60% 0% 20% 0% 0%	0 1 5 0 2 3 1	0% 8% 38% 0% 15% 23% 8%	3 3 3 2 4	4 5 9 5 0 4 0	2 3 3 3 3 11 19 11 2 8	% % % 7% 99% 11%		

Table 9. Third Selection to Survey Question 2

Please rank your top 3 concerns regarding existing landfills (1 being most important)

Location	Mont	gomery	Ann	iston	Aul	ourn	Tr	oy	Hunt	sville	Rep	ton	Unio	ntown	Flore	ence
Change to landscape	0	0%	0	0%	2	7%	1	11%	1	9%	3	9%	0	0%	0	0%
Noise	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	6%	2	17%
Sanitary conditions	4	31%	3	30%	4	14%	1	11%	1	9%	5	16%	8	44%	5	42%
Traffic	1	8%	1	10%	1	3%	1	11%	2	18%	1	3%	2	11%	0	0%
Reduction in property value	3	23%	0	0%	4	14%	0	0%	2	18%	5	16%	2	11%	1	8%
Impact to water quality	1	8%	2	20%	1	3%	0	0%	2	18%	3	9%	1	6%	1	8%
Loss of wildlife habitat	1	8%	0	0%	4	14%	2	22%	1	9%	5	16%	0	0%	0	0%
Loss of productive farmland	2	15%	1	10%	4	14%	1	11%	0	0%	2	6%	2	11%	2	17%
Aesthetics	1	8%	3	30%	7	24%	2	22%	2	18%	7	22%	2	11%	1	8%
Other	0	0%	0	0%	2	7%	1	11%	0	0%	1	3%	0	0%	0	0%
Total	13	100%	10	100%	29	100%	9	100%	11	100%	32	100%	18	100%	12	100%
Location	Dec	atur	Fair	hope	Dot	:han	Tusca	aloosa	Birmiı	ngham	To	tal	Per	cent		
Location Change to landscape	Dec	ow 0%	Fair	hope 25%	Dot	han 8%	Tusca 1	aloosa 20%	Birmii 3	ngham 23%		tal 4		cent %		
											1		8			
Change to landscape	0	0%	2	25%	1	8%	1	20%	3	23%	1	4	8	%		
Change to landscape Noise	0	0%	2	25%	1	8%	1 0	20%	3	23%	3	4	222	%		
Change to landscape Noise Sanitary conditions	0 0 1	0% 0% 17%	2 0 1	25% 0% 13%	1 1 3	8% 8% 25%	1 0 0	20% 0% 0%	3 0 1	23% 0% 8%	3	4 4 7	8 2 2:	% % L%		
Change to landscape Noise Sanitary conditions Traffic	0 0 1 1	0% 0% 17%	2 0 1	25% 0% 13%	1 1 3 0	8% 8% 25% 0%	1 0 0	20% 0% 0% 0%	3 0 1 0	23% 0% 8% 0%	1 3 1 2	4 7 1	8 2 2: 6	% % L%		
Change to landscape Noise Sanitary conditions Traffic Reduction in property value	0 0 1 1	0% 0% 17% 17% 33%	2 0 1 1	25% 0% 13% 13%	1 1 3 0	8% 8% 25% 0% 25%	1 0 0 0	20% 0% 0% 0% 20%	3 0 1 0	23% 0% 8% 0% 23%	1 3 1 2 1	4 4 7 1 6	8 2 22 6 11 9	% % 1% %		
Change to landscape Noise Sanitary conditions Traffic Reduction in property value Impact to water quality	0 0 1 1 2	0% 0% 17% 17% 33%	2 0 1 1 0	25% 0% 13% 13% 0% 0%	1 1 3 0 3 1	8% 8% 25% 0% 25% 8%	1 0 0 0 1	20% 0% 0% 0% 20%	3 0 1 0 3 3	23% 0% 8% 0% 23% 23%	1 3 3 1 2 1	4 7 1 6 6	8 2 2 6 1 9 8	% % 1% %		
Change to landscape Noise Sanitary conditions Traffic Reduction in property value Impact to water quality Loss of wildlife habitat	0 0 1 1 2 1	0% 0% 17% 17% 33% 17%	2 0 1 1 0 0	25% 0% 13% 13% 0% 0% 13%	1 1 3 0 3 1	8% 8% 25% 0% 25% 8%	1 0 0 0 1 0	20% 0% 0% 0% 20% 0%	3 0 1 0 3 3	23% 0% 8% 0% 23% 23%	1 3 3 1 2 1 1	4 4 7 1 6 6 5	8 2 2 6 19 9 8 8	% % L% % %		
Change to landscape Noise Sanitary conditions Traffic Reduction in property value Impact to water quality Loss of wildlife habitat Loss of productive farmland	0 0 1 1 2 1 0	0% 0% 17% 17% 33% 17% 0%	2 0 1 1 0 0 1	25% 0% 13% 13% 0% 0% 0%	1 1 3 0 3 1 0	8% 8% 25% 0% 25% 8% 0%	1 0 0 0 1 0 0	20% 0% 0% 0% 20% 0% 0%	3 0 1 0 3 3 1	23% 0% 8% 0% 23% 23% 8%	1 3 3 1 2 1 1 1 1 3	4 4 7 1 6 6 5 5	8 2 2 6 19 9 8 8 8	% % 1.% % 5.% %		

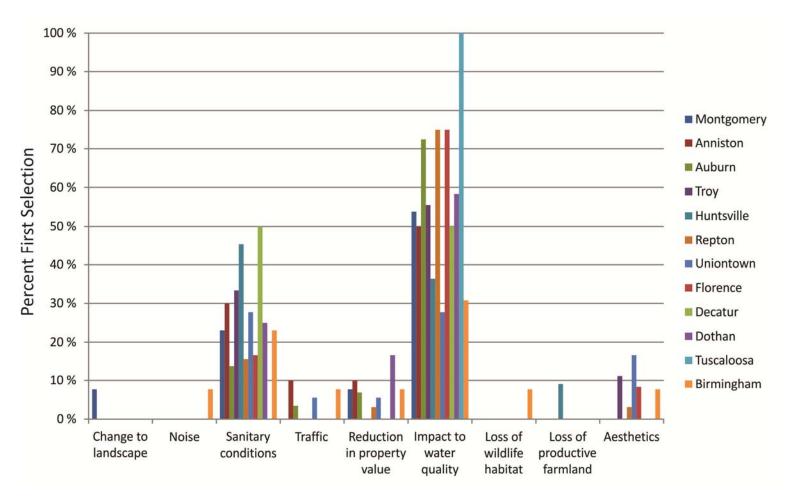


Figure 14. First selection response to survey question 2 for all public meetings.

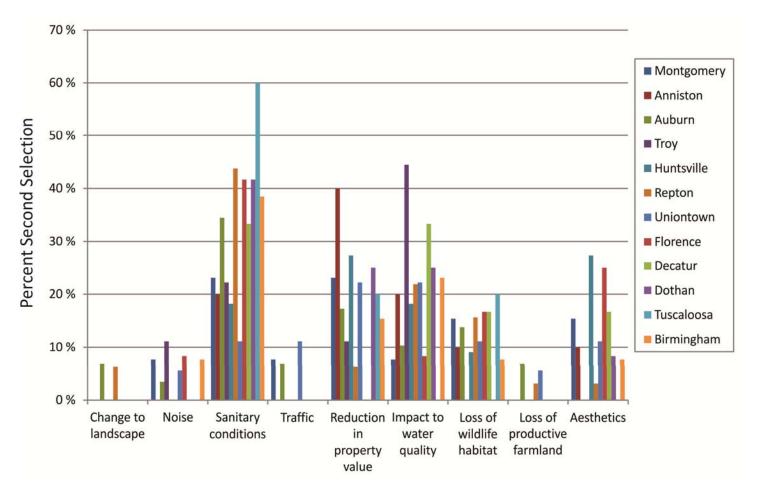


Figure 15. Second selection response to survey question 2 for all public meetings.

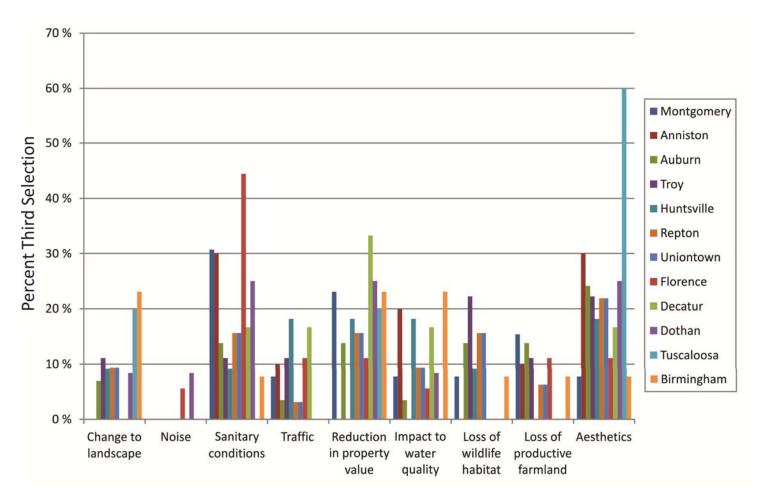


Figure 16. Third selection response to survey question 2 for all public meetings.

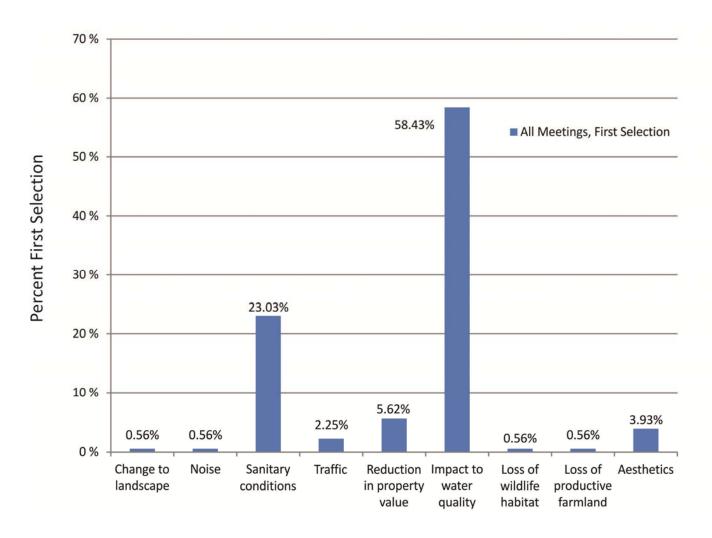


Figure 17. Cumulative percent first selection for question 2 for all meetings.

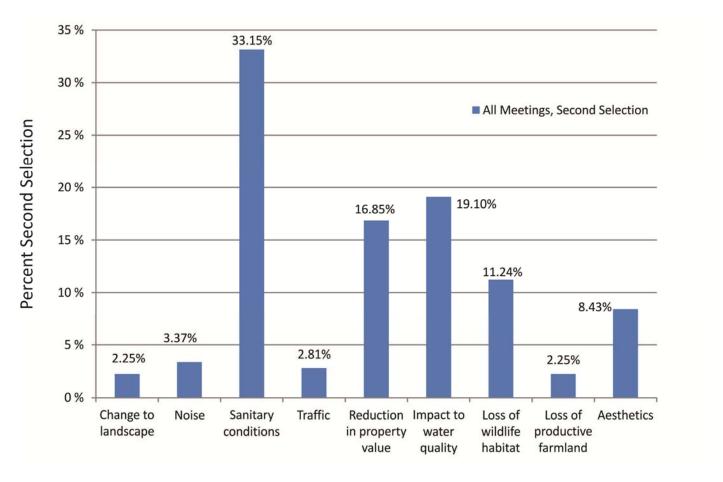


Figure 18. Cumulative percent second selection for question 2 for all meetings.

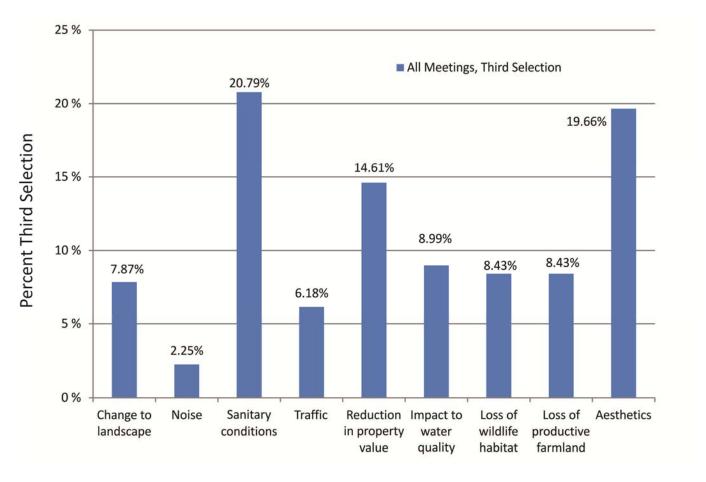


Figure 19. Cumulative percent third selection for question 2 for all meetings.

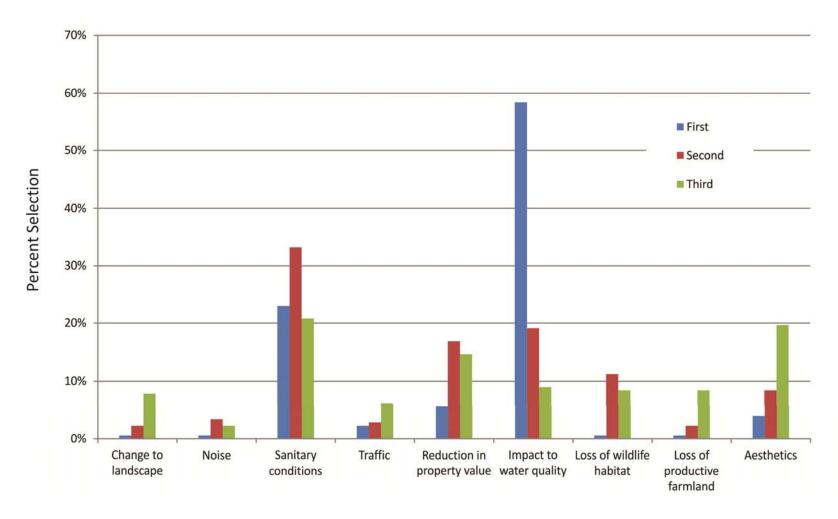


Figure 20. Cumulative percent all selections for question 2 for all meetings.

 Table 10.
 All Responses to Survey Question 3

Where do you get your information regarding landfill issues?

Source	Montgomery	Anniston	Auburn	Troy	Huntsville	Repton	Uniontown
None	0	0	0	0	0	0	3
Newspapers	12	7	23	8	11	35	19
Television	8	4	16	1	7	24	17
Public Meetings	11	11	25	8	10	44	23
Websites	11	9	18	6	10	22	8
Local Community Leaders	7	3	18	5	8	33	15
Family Members	1	1	4	1	2	12	15
Friends and Neighbors	7	4	13	4	4	25	22
Mailed Cards and Newsletters	3	1	0	2	0	13	3
Other	6	4	9	4	1	3	6
Source		_					
Source	Florence	Decatur	Fairhope	Dothan	Tuscaloosa	Birmingham	Total
None	Florence 0	Decatur 0	Fairhope 2	Dothan 0	Tuscaloosa 0	Birmingham 0	Total 5
None			•				
	0	0	2	0	0	0	5
None Newspapers Television	0 12	0 5	2 5	0 14	0	0 8	5 165
None Newspapers Television Public Meetings	0 12 8	0 5 4	2 5 5	0 14 10	0 6 4	0 8 4	5 165 112
None Newspapers Television Public Meetings Websites	0 12 8 10	0 5 4 5	2 5 5 4	0 14 10 17	0 6 4 6	0 8 4 7	5 165 112 181
None Newspapers Television Public Meetings Websites Local Community Leaders	0 12 8 10	0 5 4 5 3	2 5 5 4 6	0 14 10 17 11	0 6 4 6 3	0 8 4 7 7	5 165 112 181 124
None Newspapers	0 12 8 10 10	0 5 4 5 3 6	2 5 5 4 6 5	0 14 10 17 11 13	0 6 4 6 3 5	0 8 4 7 7 6	5 165 112 181 124 131
None Newspapers Television Public Meetings Websites Local Community Leaders Family Members	0 12 8 10 10 7 3	0 5 4 5 3 6 3	2 5 5 4 6 5	0 14 10 17 11 13 7	0 6 4 6 3 5 4	0 8 4 7 7 6 5	5 165 112 181 124 131 61

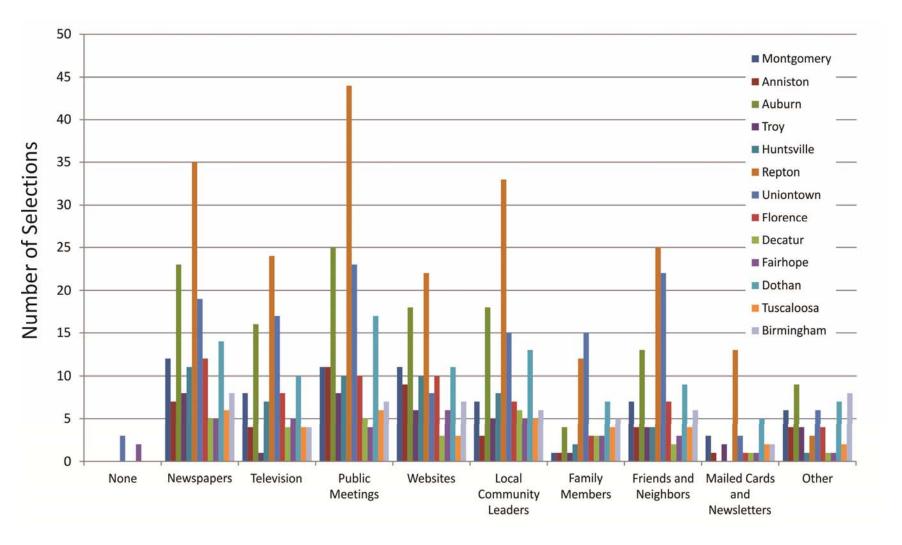


Figure 21. Responses to survey question 3 for each public meeting.

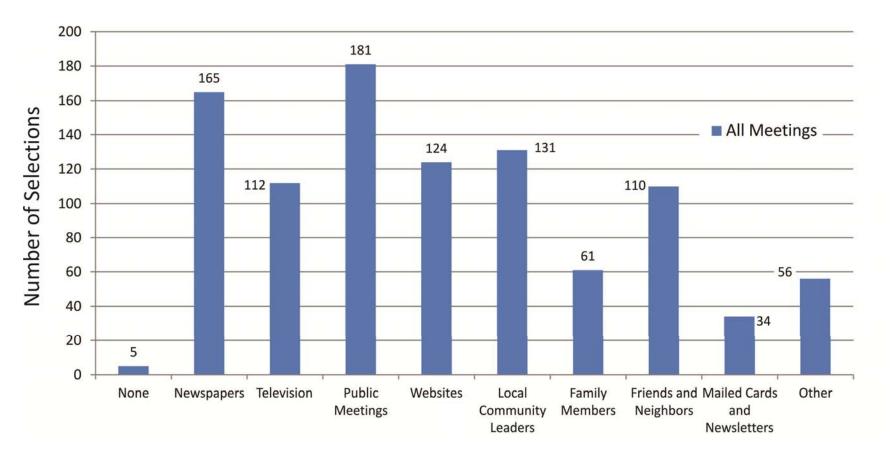


Figure 22. Cumulative responses to survey question 3 from all meetings.

 Table 11.
 All Responses to Survey Question 4

How should public opinion and technical recommendations be balanced in siting new landfills?

Choice	Mor	ntgomery	Αı	nniston	Α	uburn		Troy	Hu	ntsville	R	epton	Uni	ontown
Public opinion should be the only consideration	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	2.2%	5	13.9%
Public opinion should be the most important factor	1	5.9%	2	15.4%	4	11.4%	0	0.0%	2	14.3%	9	19.6%	20	55.6%
Public opinion should be considered equally with scientific or technical recommendations	11	64.7%	10	76.9%	25	71.4%	6	60.0%	10	71.4%	33	71.7%	7	19.4%
Scientific or technical recommendations should be the most important factor	3	17.6%	1	7.7%	6	17.1%	4	40.0%	2	14.3%	3	6.5%	4	11.1%
Scientific or technical recommendations should be the only consideration	2	11.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Choice	Fl	orence	D	ecatur	Fa	irhope	D	othan	Tus	caloosa	Birr	ningham		Total
												0 -		
Public opinion should be the only consideration	0	0.0%	0	0.0%	1	8.3%	0	0.0%	0	0.0%	0	0.0%	7	2.9%
Public opinion should be the only consideration Public opinion should be the most important factor	0	0.0%	0	0.0%	1	8.3%	0	0.0%	0	0.0%				2.9%
	_						_		_		0	0.0%	7	
Public opinion should be the most important factor Public opinion should be considered equally with scientific	0	0.0%	0	0.0%	2	16.7%	2	11.8%	1	12.5%	2	0.0%	7 45	18.6%

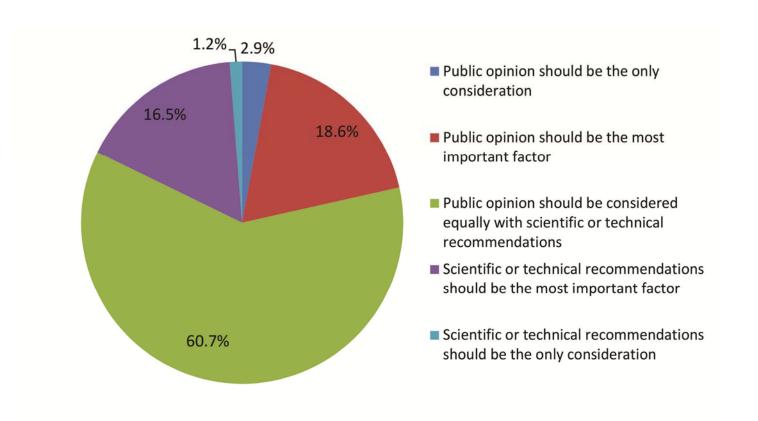


Figure 23. Cumulative percent response to survey question 4 from all meetings.

those who thought scientific or technical recommendations should be the most important factor (approximately 17%) were generally equal.

Survey question 4 also asked respondents whether the "90 day" default acceptance clause in the current landfill permitting process should be removed, and if so, to suggest an alternative. This particular survey question was a point of much discussion in the table-top dialogs during the public meetings. Responses are shown for individual meeting locations and as totals for all meetings in Figures 24–25. The majority of respondents thought that the 90-day default acceptance clause should be removed. Although the survey question requested suggested alternatives from those respondents who thought the 90-day default acceptance clause should be removed, not all respondents provided alternatives. Figure 26 summarizes suggested alternatives for those who provided them. The majority of respondents thought that the 90-day default acceptance clause should be replaced with a 90-day default disapproval clause. Many respondents also thought that local host government officials should be required to vote.

Stakeholder Dialogs

Stakeholder discussions were conducted with a number of individuals and groups during Phase I activities. Stakeholders are defined as those persons or groups, separate from the general public, who are involved in a more direct way with aspects of solid waste management in Alabama. Stakeholders engaged by the project team during this project included elected officials, regulators, business persons, and non-governmental environmental groups. Unsolicited written documents provided by stakeholders are included in Attachment 4. Stakeholder discussions were conducted in a number of ways: by telephone, by project team visits, and via email. Additionally, presentations by the project team were given at three stakeholder meetings (the 2012 Solid Waste Association of North America (SWANA), Alabama Chapter Fall Forum (November, 2012); the Environmental Committee meeting of Manufacture Alabama (February, 2013); and the 2012 SWANA Alabama Chapter Spring Forum (April, 2013). The survey distributed during the general public meetings was also distributed at the Manufacture Alabama presentation, with 33 respondents.

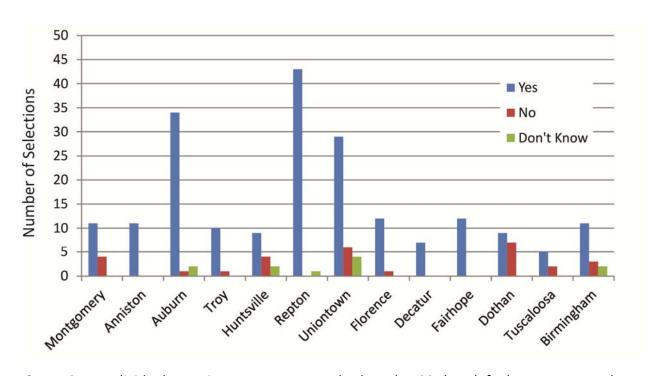


Figure 24. Individual meeting responses to whether the 90-day default acceptance clause should be removed (survey question 4).

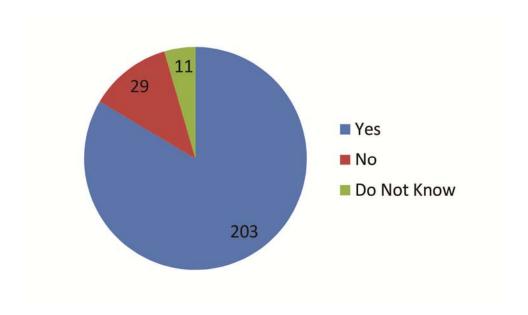


Figure 25. Total responses (all meetings) to whether the 90-day default acceptance clause should be removed (survey question 4).

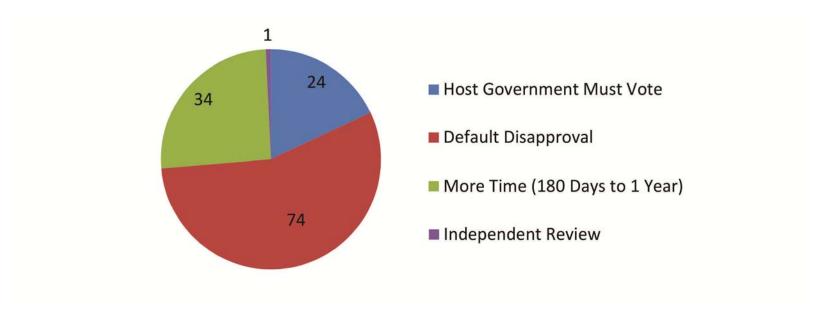


Figure 26. Suggested alternatives for replacement of the 90-day default acceptance clause (survey question 4).

Stakeholder perspectives regarding Alabama's current solid waste permitting process, expressed during discussions with the project team, were generally more favorable towards the current landfill permitting process than those expressed by the general public. For the most part, the exceptions to this were discussions with non-governmental environmental and social action groups. For those stakeholders either directly or affiliated with businesses involved in landfilling, Alabama's current permitting process was viewed positively. A number of these stakeholders noted that environmental site assessments to confirm the suitability of a potential landfill site, although not required by law, are routinely performed by the applicant as part of their due diligence prior to seeking host government approval. Additionally, for the most part, these stakeholders viewed the 90-day decision timeframe as a reasonable component of Alabama's permitting process, noting that 90 days is sufficient for a local host government to make a decision. Further, extending this timeframe was viewed as potentially placing an unfair financial burden on the applicant. Interestingly, a considerable number of stakeholders believed that default approval (after 90 days) should be replaced by default disapproval (an example from the Manufacture Alabama stakeholder group is shown in Figure 27). The most commonly voiced reason for this was similar to that of the general public; that is, the local host government should be required to vote. For these stakeholders, the important issue was to constrain the amount of time a local host government has to decide on approval or disapproval of a permit application.

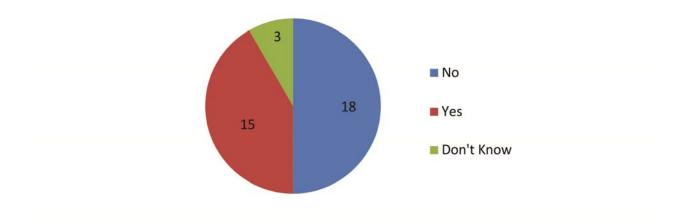


Figure 27. Responses from Manufacture Alabama stakeholder meeting to whether the 90-day default acceptance clause should be removed (survey question 4).

A considerable number of stakeholders also believed that the RPC's in general were not capable of performing their intended role in Alabama's current landfill permitting process. This was attributed mostly to a lack of resources (funding and personnel), a lack of training with respect to determining the consistency or inconsistency of a permit application with respect to the regional solid waste management plan, and external pressure from local host governments. However, most stakeholders also believed that the intended role of the RPC's was a necessary component of the overall permitting process.

Stakeholders associated with non-governmental entities generally characterized as environmental or social action groups for the most part viewed the current permitting process as considerably flawed. The overall perceptions of these groups were: (1) little emphasis is placed on the potential negative environmental consequences of a proposed landfill during the host government approval phase, and (2) the concerns of socially-disadvantaged citizens (with respect to potential health effects, environmental concerns, and reduction in property values) are largely disregarded in the current permitting process. These groups were strong advocates for involving ADEM and ADPH in a decision-making capacity during the local host government approval process. In particular, these stakeholders believed that ADEM should be required to determine the environmental suitability of a proposed landfill site during the host government approval phase, as a component of an assessment of landfill need.

Phase I Discussion and Alternatives

Results from the public meeting dialogs and survey responses provide a means of gauging public perception regarding the process Alabama follows when permitting a solid waste landfill. It is fair to note that public perception should not be considered the most important factor in performing any function in which the larger public good must be met, and it is also fair to note that in the specific case of permitting solid waste landfills in Alabama, the public already has a very important and powerful voice in the sense that they control the political destiny of the host governmental authorities whose task it is to approve a landfill application (based on assessment of need) prior to this application being submitted to ADEM for technical review. Additionally, it must be noted that although all public meetings held as part of this project were

free and open to all interested citizens, attendees at these meetings were for the most part those citizens who have a more profound interest in issues related to solid waste management in the state. Thus, it could be argued that the public perception of solid waste landfill issues noted here in actuality represent a smaller subset of the larger public's perception. In fact, an argument could be made that by virtue of the attendance levels for these public meetings, the public by-and-large is either disinterested in this subject (compared to the other pressing issues in their day-to-day lives), or are relatively satisfied with the way solid waste issues are managed in the state. This is an easy argument to understand, since for most citizens the cradle-to-grave path of solid waste ends when they throw their trash into their trashcan, or a trashcan on the street, or a dumpster. Nevertheless, a thoughtful consideration of the concerns, insights, and perceptions noted during the public meetings held as part of this project are useful data in considering if in fact Alabama's current solid waste landfill permitting process should be modified, and if so, what these modifications should be. However, before addressing this topic, it is revealing to consider how other states address solid waste landfill permitting, compared to Alabama.

Comparison of Alabama's Solid Waste Landfill Permitting Process with other States

Alabama's solid waste landfill permitting process was compared with the permitting processes in other states as a means of identifying potential improvements to Alabama's process. The states used in this comparison are Tennessee, Mississippi, Georgia, South Carolina, Texas, Arkansas, and Vermont. It is useful to understand the permitting processes used by neighboring states (Mississippi and Georgia) because of their similar size, population, geological features, terrain and climate. Other states were chosen for review because of their varying sizes and structure with due emphasis given to the southeastern region. Details included in legislation and regulations vary a great deal from state to state; the information presented here generalize different aspects of each program to allow for a better comparison. Differences in the details of each process are described in the explanations provided in the tables below. The processes described in this report were derived from state legislation and regulations made publicly available, and some details may vary slightly from the actual standard operating procedures of each state.

All the states included in this review have a basic structure that allows for a local and regional review of a potential solid waste disposal facility. Each local host jurisdiction and region has a solid waste management plan (SWMP) that a proposed facility must be consistent with. However, each SWMP has different guidelines, requirements and goals that are established by law and the state environmental agency and could consist of a great level of detail. The elements and levels of detail of each of these SWMP's are not discussed here except to note that not all SWMP's have the same requirements other than those established by the US EPA (40 CFR Part 258 (Subtitle D of RCRA)).

Tables 12-15 describe the structure of the permitting programs of each state with respect to Alabama. Table 12 is a review of the local/regional approval for each state. It describes the method of approval, time limits and default resolutions. Table 13 describes the involvement of the state environmental agency in local issues. This includes the methods used for assessment of need, how decisions are validated, and how the public participates in the process. Note that the assessment of need is defined in different ways for different states. Tables 14-15 provide a more detailed description of individual states needs and environmental assessments, respectively. These tables show the entity responsible for the assessment, when the assessment is done in relation to host government approval, and the methods of the assessment.

The first column in Table 12 describes whether the review is a joint or separate approval by each entity, and the second column describes the method of each approval. For Alabama, there is a local public review process and, if approved locally, a regional statement of consistency (SOC) is needed from the RPC prior to application to the state agency.

Tennessee is very similar to Alabama except for differences in the structure of the regions. Like Alabama's 12 RPC districts, Tennessee has 9 development districts that develop a SWMP for their district. However, these districts are not responsible for enforcement of the SWMP. Tennessee allows regional agreements to be formed between two or more counties within a district to encourage a regional approach to solid waste management. If a county is included in a regional agreement, the region enforces the district SWMP. If a county is not included in a

Table 12. Local and Regional Approval for Alabama and Comparison States

State	Local/Regional	Method	Time Limit	Default
AL	Separate approvals ¹	Public Review, HGA vote-Regional SOC(P) ¹	90 days ¹⁰	Approval
TN	Separate approvals ²	Public Review, HGA vote-Regional SOC(P) ²	60 days min. ¹¹	None ¹⁴
MS	Joint approval ³	Public Review, HGA vote, Change of SWMP ⁶	90 days ¹²	Denial
GA	Joint approval ³	SOC(P,Z)/Public meeting on need and siting ⁷	None ¹³	None ¹⁵
SC	Joint approval ³	SOC(P,Z,B)	None	N/A ¹⁶
TX	Partial Joint Evaluation ⁴	Local Review Committee Report ⁸	90 days	None ¹⁷
AR	Separate Approvals ⁵	SOC (P,Z,B)/Regional Needs Assessment ⁹	None ¹³	None ¹⁵
VT	Joint approval ³	SOC (P,Z)	None	N/A ¹⁶

HGA= Host Governmental Authority SOC= Statement of Consistency SWMP=Solid Waste Management Plan

P=Planning

Z=Zoning Ordinance

B=Buffers/Exclusive Siting Criteria

- 1: Both done prior to application submission
- 2: Local approval prior to application submission
- 3: Local units may be included in regional plan.
- 4: Local/Regional committee report rewiewed by state agency
- 5: Local host approval only if another "high impact" facility located within 12 miles
- 6: If approved, HGA must change Local SWMP to include proposed facility
- 7: Needs meeting only required for publicly-owned facility
- 8: Committee of local and regional interests produces fact-based report of issues both resolved and unresolved based on Part I and II Application
- 9: Need defined: Projected regional capacity must not exceed 30 years unless HGA approves such excess capacity
- 10: Application submission, public notice and hearing, and HGA vote
- 11: Application submission, 30 day comment period, 15 days for public notice and hearing if requested, 30 days for HGA vote
- 12: Application submission, public notice and hearing, 90 days after hearing for HGA vote
- 13: No time limit specified except for public notice and hearing timeframes
- 14: HGA must vote
- 15: Decisions made in public meetings
- 16: Must have SOC to continue
- 17: Report is fact-based and does not recommend approval or disapproval

Table 13. State Agency Involvement in Local Decisions (Alabama and Comparison States)

State	State Agency Involvement	Assessment	Reviewed By	Public Input
AL	None ¹	6 Evaluation Criteria	HGA	Public Meeting
TN	None ¹	8 Evaluation Criteria	HGA	Public Comment ¹¹
MS	Partial ²	5 Evaluation Criteria	HGA/Agency	Public Hearing
GA	Low-Partial ³	Need ⁸ /Site Selection ⁸ /Site Suitability ⁹ /Negotiations ⁸	HGA/Agency	Public Meetings
SC	High-Partial ⁴	Need ⁹ /Consistency ^{8/9} /Site Suitability ⁹ /Negotiations ⁸	HGA/Agency	Public Meetings
TX	Full ⁵	Local Review Committee Report/Part I and II Application	HGA/RA/Agency	Public Meetings ¹¹
AR	Low-Partial ⁶	Co-location ⁸ /Need Assessment ¹⁰ /Site Suitability ^{9/8}	HGA/RA/Agency	Public Meetings
VT	Full ⁷	Application Review	HGA/RA	Public Comment

HGA=Host Governmental Authority RA=Regional Authority SWMP=Solid Waste Management Plan

- 1: State agency only ensures that proper local approval procedures were followed
- 2: State agency must approve HGA SWMP change by evaluating siting criteria identified in the plan. (could be exclusive siting criteria)
- 3: State agency only determines site suitability after site is selected
- ${\tt 4: State\ agency\ determines\ need, approves\ consistency\ and\ determines\ site\ suitability}$
- 5: State agency reviews report and Part I and II application
- 6: State agency can override RA decision if unsubstantiated
- 7: State agency produces a fact sheet concerning facility location, design, operation, etc. for review by HGA's and other entities
- 8: HGA Responsibility
- 9: State Agency Responsibility
- 10: RA Responsibility
- 11: Public hearing may be needed in special occasions

Table 14. Assessment of Need (Alabama and Comparison States)

State	Responsible Entity	Relation to Local Approval	Method
AL	HGA/RA	Concurrent	SWMP Review
TN	RA	Concurrent	SWMP Review
MS	HGA/State Agency	Concurrent	SWMP Review
GA	HGA	Concurrent	Public Meeting ¹
SC	State Agency	Previous/Concurrent	Fixed Criteria ²
TX	HGA/State Agency	Concurrent/Subsequently	Review Committee/Part I and II Application ³
AR	RA	Concurrent	Fixed Criteria/Public Meeting ⁴
VT	HGA/State Agency	Concurrent	SWMP Review

HGA=Host Governmental Authority RA=Regional Authority SWMP=Solid Waste Management Plan

- 1: Not required for privately owned facilities
- 2: No new facility within 75 miles of 2 operating facilities
- 3: Need may be addressed if considered a matter of concern to the review committee or public
- 4: The regional excess capacity cannot exceed 30 years unless approved by HGA

Table 15. Environmental Assessment (Alabama and Comparison States)

State	Responsible Entity	Relation to Local Approval	Method
AL	State Agency	Subsequently	Exclusive Siting Criteria Only
TN	State Agency	Subsequently	Part 1 Application ⁴
MS	State Agency	Subsequently	Exclusive Siting Criteria Only
GA	State Agency	Subsequently	Site Suitability ⁵
SC	State Agency	Subsequently	Site Suitability ⁵
TX	HGA/State Agency	Concurrent/Subsequently ¹	Review Committee/Part I and II Application ⁶
AR	RA/State Agency	Concurrent ²	Site Suitability
VT	State Agency	Concurrent/Subsequently ³	Hydrogeological Study/Application Review ⁷

HGA=Host Governmental Authority RA=Regional Authority

- 1: Depends on whether or not the review committee process was utilized
- 2: RA checks exclusive siting criteria. Agency invites other authorities to participate in site investigation
- 3: Subsequent to SOC; However, public may comment on environmental issues at time of application submission
- 4: Exclusive criteria in addition to other requirements of the application
- 5: Hydrogeological Study with explicit criteria to achieve
- 6: Any issues, including issues with exclusive siting criteria, may be addressed
- 7: Agency uses public comments and other criteria to verify satisfactory siting of the facility

regional agreement, then local approval is the only approval required because all regional and local plans must conform to the district SWMP to be an approved plan. Mississippi has a joint approval where both the host governmental authority (HGA) and regional authority (RA) must make provisions to include a proposed site in their SWMP's. The HGA may either reject the application outright or decide to begin a local review process like Alabama and Tennessee. If the HGA approves the site, it must file a request with the state environmental agency for approval of the change to their solid waste plan. This request would also involve the SWMP of any regional entity with jurisdiction in the area of the proposed facility.

In Georgia, much like Tennessee, a county may develop its own SWMP, or two or more counties may decide to form a region and create a joint SWMP. The LGA must hold a public needs meeting and a public siting decision meeting to determine approval of a proposed facility. If the applicant is a private entity the facility is exempt from a needs meeting. Also, if the host county is involved in a joint (regional) plan, a needs meeting must be held in each county within the region but only one siting decision meeting is held in the host jurisdiction.

For South Carolina, the applicant must obtain a SOC from the HGA and Regional Authority that outlines how the facility is consistent with planning, zoning, and established buffer requirements. Vermont is much the same way except buffer requirements are not evaluated. For each of these two states, South Carolina and Vermont, there is no public review process prior to the issuance of the SOC. Instead, the state agency is responsible for hearing public concerns regarding siting and need and must provide resolution to these concerns by either denial of the permit or approval with public statement explaining approval.

In Texas, the applicant has an option to enter into an agreement with affected people and/or identify issues of concern, or apply directly to the state agency. Regardless of the option chosen, the application must include zoning and land use maps and the applicant must provide an evaluation of the impact on the surrounding area. If the applicant chooses to engage in the local review process, the appropriate local and regional officials appoint members with certain qualifications to serve on the review committee. This approval is considered a partial joint approval because the committee consists of optimally 12 members but must maintain a 2:1

ratio of local appointments to regional appointments, thus giving more weight to regional interests. The objective of this committee is to identify and address all potential issues and report their findings to the state agency. In their report, the committee must identify which issues were resolved and which remain unresolved, and provide details of their findings.

For Arkansas, a regional public review process is utilized rather than a local public review like that of Alabama and Tennessee. The HGA must provide a SOC for local land use and zoning but only has the opportunity for a public review if another facility is located within 12 miles of the host jurisdiction. The applicant must petition the regional authority for a determination of consistency with exclusive siting criteria, planning, and need, and must include the regional determination with the application to the state agency.

The matter of time limits and default decisions are exclusive to Alabama, Tennessee and Mississippi. As noted earlier, in Alabama, the HGA has 90 days from the time of the application to make a decision on the landfill. If no decision is made within 90 days of the submittal of the application, the proposed facility is automatically approved. However, there is no mechanism stated in law that requires the HGA to notify the applicant of receipt of the application. Therefore, the beginning of the 90-day period can be manipulated to some degree by the HGA. In Tennessee, the HGA must notify the public of a proposed facility application and the opportunity to submit comments. A 30-day comment period continues from the time of application submission, where the public may request a hearing. If a hearing is granted, the HGA must provide notice of the hearing 15 days prior to the hearing. Thirty days after the close of the comment period and/or after the public hearing, the HGA must make a decision on the proposed facility. There is no default specified for occasions where the HGA fails to decide within the time frame specified. In Mississippi, the HGA has 90 days from the public hearing to vote on the proposed facility. If no decision is made, the application is rejected at that time and the applicant may re-apply if they wish. In Texas, the local review committee has 90 days to complete their report but there is no decision concerning approval or denial at this stage.

Table 13 describes the types of local evaluations that are done and how involved the state environmental agency is in these processes. For Alabama and Tennessee, the state agency (in

Alabama's case ADEM) is not involved at all in the local review of the proposed facility. Specified criteria are used to assess the facility and public concerns are heard followed by a vote on the facility. Mississippi generally follows the same format except the review takes into account parameters specified in the SWMP. In Mississippi, if the facility is approved locally then the state agency has the final say in whether or not changes in the local SWMP to include the facility should be approved. Georgia and South Carolina have a similar structure in their approval process, except that the state agency in South Carolina is more involved than the state agency in Georgia. This difference can be seen in the initial approval of each of these two states. As discussed earlier, initially, the HGA in Georgia must approve the site by conducting a needs and siting decision meeting. However, in South Carolina, need is determined by the state agency in that no new facility may be located within 75 miles of two or more facilities. If the facility meets this requirement, a SOC must be obtained and reviewed by the state agency prior to approval. Following the local approval process, the Georgia and South Carolina processes are almost exactly the same. The next approval is a hydrogeological site suitability study, where the agency may approve the site if it meets established criteria. Following this step, the full technical evaluation of an application may commence and concurrently, with the submittal of a petition by the public, a facility issues negotiation process is initiated. The state agency may not take part in these negotiations. This process allows affected persons to negotiate potential compensation agreements as well as certain facility operation concerns (e.g., hours of operation, maintenance of a vegetative buffer, etc.) with the applicant.

The State of Texas is fully involved in the local approval process of solid waste disposal facilities. Except for local land use and zoning ordinances, the state agency may use any information provided in the local review committee report and application to assist in its decision. In Arkansas the state agency is only slightly involved. After local and regional approval, the state agency performs a site investigation, in which any interested local, regional, state, or federal authorities may take part in or simply attend. In Vermont, a full application is submitted to the state agency along with the SOC's from the appropriate HGA and regional agency. The state agency has its own internal criteria that are evaluated to ensure the site is located in an optimal location. It should be noted that the size of Vermont allows for a closer relationship between

local and state interests, thus enabling the state agency to more closely understand the concerns of the local community.

In the local assessments in Alabama and the comparison states, measures are taken to gather public input in either a meeting or comment period. However, in all of these states (including Alabama) there is no quantifiable measure to define the amount of influence the public can have on the approval of a landfill. Georgia, South Carolina, and Texas attempt to address this issue, but there still exists some level of ambiguity with respect to how public opinion is considered in the decision-making process. The most important things to note in Table 13 are the checks to decisions made at the local level. When there are two or more entities responsible for decision review, each entity has the opportunity to check the others and overturn an approval if they deem necessary. In most situations, approval is needed from all reviewing entities to continue the permitting process. Arkansas is unique in the sense that disapproval at the regional level can be overturned by the state agency if the agency determines that this disapproval is unsubstantiated.

Table 14 describes how needs assessments are done within each permitting program. This table is self-explanatory and some level of insight has already been given in the discussion of Tables 12-13. In most cases, "need" is defined in a local or regional SWMP and may be brought up as an item of discussion in a public meeting or in review by local, regional and/or state authorities. For South Carolina, the fixed criterion for "need" is that a disposal facility may not be located within 75 miles of two other disposal facilities. The fixed need criterion noted in the Arkansas permitting program is that a region may not have disposal capacity in excess of 30 years, unless the excess capacity is approved by the host community. In Texas, the issue of "need" may be addressed if it is considered an issue by the local review committee, but is not required.

Table 15 explains how the environment and public health are addressed in the permitting process of each state. For all states, siting criteria exist that must be met to protect the environment and other natural resources of each state. These criteria could have a wide range of requirements to meet but in no way may these requirements be less stringent than federal criteria (40 CFR Part 258 (Subtitle D of RCRA)). Most states take further measures to ensure the

facility is located at a site suitable for a landfill. Tennessee and Texas have two or more phases in their applications. The first phase in Tennessee and the first and second phase in Texas are checks to ensure the facility is located at a suitable site and all administrative information is present. In this way, the applicant does not have to provide full facility designs until all administrative details are approved. Similar to the needs assessment, the local review committee in Texas may include environmental issues in their review. For Georgia, South Carolina and Arkansas, a hydrogeological analysis is done to determine the suitability of the site with respect to potential groundwater contaminant issues. Arkansas allows for a more thorough site investigation than either Georgia or South Carolina because, as mentioned earlier, they invite other authorities to be involved in the site suitability study. In Vermont, the applicant must conduct a study to determine the groundwater conditions of the site and submit the results in a report with their application. If results are deemed satisfactory, the state agency will further investigate the site to ensure it is optimally located. Of the 8 states reviewed, Alabama and Tennessee are the only states that do not require some form of public input on the siting or environmental impact during the HGA review process and prior to an application continuing to the technical review stage.

Issues Related to Alabama's Solid Waste Landfill Permitting Process

With consideration to the permitting processes noted for the comparison states (Tables 12-15), there are several aspects of Alabama's current landfill permitting process that are advantageous. Alabama's current landfill permitting process is very streamlined. The non-ADEM portion of the process (HGA and RPC responsibilities) moves in a linear step-by-step fashion; pauses, stops, and reverses in this linear process do not exist by design. Of the comparison states, Tennessee's process most closely resembles Alabama's. The principal advantages of Alabama's current process are speed and predictability. These characteristics are especially important to applicants, since they allow costs associated with the permitting process to be predicted and controlled. Another advantage of Alabama's current landfill permitting process is the separation of authorities and responsibilities between the HGA and RPC, and the state's environmental regulator ADEM. This is referred to as a "firewall" in this report (see Figure 2). This firewall separates issues and decisions predominantly in the political domain

from issues and decisions related to the technical design and operation of the proposed landfill. Again, Tennessee's landfill permitting process most closely resembles Alabama's in this regard. The principal advantage of this firewall design is that it protects ADEM's regulatory oversight and enforcement role from the possibility of conflicts of interest, while relegating authority and responsibility for decisions related principally to community planning to elected HGA representatives.

Based on public perceptions and concerns voiced during the public meetings conducted as part of this study, it is apparent that the advantages in Alabama's current landfill permitting process noted above are interpreted by a number of those citizens who participated in the public meetings during this study as disadvantages. The main negative perceptions and concerns were presented earlier in this report and are given again here:

- The assessment of landfill need is perceived by the public as inadequate
 - Local host government assessment of need (represented by the evaluation of six factors defined in §§ 22-27-48) is questionable
 - RPC process does not provide meaningful benefit to the process
 - Social justice concerns are not accommodated in the process
 - Consideration of potential environmental issues is not required by the local host government
- Public/local engagement and information transfer is perceived to be inadequate
 - Public notice process is thought to be inadequate
 - Public access to site suitability and needs assessment information is considered lacking
- Host government decision-making process is perceived as not transparent
- 90 day default "yes" rule is almost universally unpopular

When comparison state's processes (Tables 12-15) are considered together with Alabama's public's concerns and perceptions noted above, it is reasonable to conclude that the processes followed by the comparison states are to some degree designed to address public concerns and

perceptions similar to those in Alabama. For example, in a number of comparison states, state environmental regulatory agencies are involved to varying degrees in the functions relegated to the HGA and RPC in Alabama (Table 13). It is difficult to determine how this heightened level of involvement by state environmental regulatory agencies positively or negatively affects the landfill permitting process in these states; however, it is likely that these processes add time and expense in the eventual acquisition of a permit. Moreover, for landfills being developed as commercial enterprises, this heightened involvement increases the potential for real or perceived conflicts of interest between the state and these private entities. Regardless, it is important to note that for most of the comparison states, the involvement of state regulatory agencies in the processes relegated to the HGA and RPC in Alabama are for the most part limited to approving changes to, and determining consistency with SWMP's, and determining site suitability with respect primarily to potential environmental suitability.

The factors underlying the negative perceptions and concerns voiced by the public during this study can be summarized as:

- 1. The belief that the HGA process can be influenced by various interests to arrive at a preconceived outcome
- 2. A misunderstanding of the RPC function, which the public perceives as a check on the HGA process but in fact is a non-binding assessment of the consistency (or inconsistency) of the proposed facility in the context of the regional SWMP
- 3. The belief that the RPC function is incapable (by virtue of a lack of knowledge/information, training, and resources) of judging the consistency or inconsistency of a proposal
- 4. The belief that the RPC process can be influenced by various interests (primarily HGA representatives) to arrive at a preconceived outcome
- 5. The belief that the mechanisms for informing the public on intent, providing the public with fact-based information supporting the proposal, and engaging the public in the decision-making process through notices and meetings, during the HGA/RPC phase of the permitting process is inadequate

- 6. The belief that HGA responsibilities can be avoided by virtue of the 90-day default acceptance clause
- 7. The belief that some entity is needed to oversee the HGA/RPC process to ensure that the process remains impartial

The most prevalent perception noted during the public meetings is contained in the last factor above; that is, that some neutral entity is needed to ensure impartiality during the HGA/RPC process. The other factors noted above can be thought of as what the public perceives as the reasons this impartial oversight is needed. For most public meeting participants, the default entity most often recommended was ADEM, and the reason for this that was most cited is the fact that ADEM is the state environmental regulatory agency and that this is "their job." This perception also reveals a misunderstanding on the part of the public regarding ADEM's oversight, compliance, and enforcement role for environmental concerns in the state. As the comparison of the roles of other state environmental agencies in the landfill permitting process demonstrates, most state agencies are not involved in decisions primarily related to the community planning aspects of a landfill permit. For state agencies that do have some involvement in some aspects of a permit application which in Alabama are relegated to the HGA and RPC, this involvement is limited to approving changes to and determining consistency with local or regional SWMP's, and assessing site suitability in a limited and defined way.

Potential Enhancements to Alabama's Solid Waste Landfill Permitting Process

The advantages in Alabama's landfill permitting process (speed, predictability, linearity, and separation of community planning decisions and regulatory decisions) and the perceived disadvantages voiced during the public meetings (assessment of landfill need, public and local engagement and information transfer, host government decision-making process transparency, 90-day default approval) can potentially be reconciled by making the relatively straightforward changes to the current permitting process noted below and shown in Figure 28. Whether these enhancements should be made through legislation and/or regulatory rule changes, how they should be implemented, and in what order they should be implemented is beyond the scope of this report.

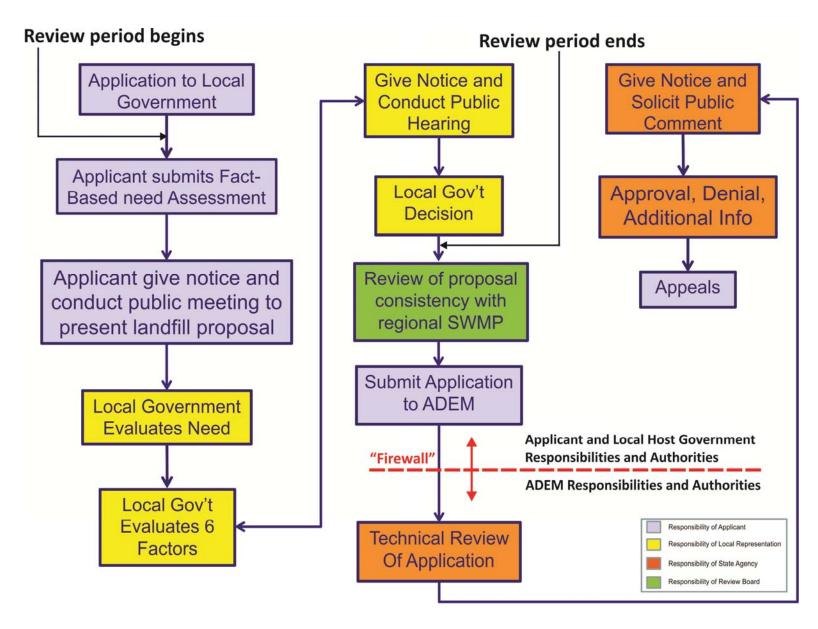


Figure 28. Flowchart representation of proposed Alabama solid waste landfill permitting process.

1. <u>Change 90-day default approval</u>. Changing the 90-day default approval option is perhaps the least controversial potential enhancement to Alabama's landfill permitting process. Implementing a change to this step in the permitting process was almost universally supported by the public during public meetings held as part of this study (Figures 24-26). Most public meeting attendees believed that the 90-day default approval should be changed to a 90-day default denial, and that the local HGA should be required to vote (rather than have the option of a default condition). There has only been one new landfill permitted in Alabama as a result of default approval by an HGA; this permit was overturned on appeal to the Environmental Management Commission (EMC) of ADEM and never constructed (see Appeals step in Figure 28) (10). The EMC is a 7-member committee appointed to 6-year terms by the governor and subject to confirmation by the Alabama Senate. It is charged, among other duties, with hearing administrative appeals of permits, administrative orders and variances issued by ADEM.

The mechanism of default approval following a defined time limit is employed in other areas of municipal governance in Alabama below the state level. For the most part, this mechanism is employed in situations where uncertainty with respect to the amount of time allowed prior to a decision will place an unreasonable financial burden on an applicant. For example, a number of municipalities in Alabama have defined time limits followed by default approval for applications involving development on private lands (11). Although none of the comparison states have default approval for landfill permits, a number of these states have a defined time limit on application process, and several have no defined time limit (Tables 12-15). As noted earlier, an advantage of a defined time limit is speed and predictability; thus, a defined time limit for HGA approval or denial, followed by a vote by the HGA on approval or denial, should address concerns voiced by the general public.

2. Evaluate the RPC as the entity assessing consistency of proposal with regional SWMP. The role currently served by the RPC in Alabama's landfill permitting process (determining consistency of proposed landfill with regional SWMP) is a necessary function. All comparison states have mechanisms in place to address this requirement (Table 12). Further, in Alabama this step in the current landfill permitting process can act indirectly as a means of delaying or

stopping a proposed landfill, since ADEM requires a statement of consistency or inconsistency with regard to the regional SWMP prior to initiating their technical review. Thus, if an RPC does not submit a statement of consistency or inconsistency to ADEM, the proposal cannot move forward, independent of approval by the HGA. However, information provided by the public and by members of various RPC's support the conclusion that in general, Alabama's RPC's are not well suited to making a determination of consistency or inconsistency. The primary reasons for this are a lack of resources (both personnel and funding), and a lack of training to properly perform an assessment. Landfill permit proposals are relatively infrequent events; thus, RPC's are infrequently required to assess a landfill permit for consistency with their regional SWMP. However, conducting an assessment is not a trivial matter, without considering other pressures which may accompany an assessment. For example, RPC's are funded in part through contributions from member local governments; thus, the potential exists for conflicts of interest between the HGA functions and RPC functions in the landfill permitting process. Given the proper resources and training, it is possible that RPC's could properly perform an assessment of consistency or inconsistency without the potential for conflicts of interest; however, considering the infrequent nature of landfill permit proposals, a more appropriate approach is to replace the RPC with some other construct specifically designed to address the technical and non-technical aspects of an assessment of consistency, and vested with the responsibility to perform this role. This is represented in Figure 28 as the responsibility of a review board. One possible construct for this review board is that it is comprised of a mix of public and private members who have the necessary qualifications to perform a comprehensive assessment of the consistency of a proposed landfill with respect to a particular regional SWMP. The board could have members appointed by the legislature, and also at-large members appointed to represent the interests of the general public, non-governmental organizations, regional and local host governments, industry, and academia. Although defining the form and structure of this review board is outside the scope of this report, the central point is that the necessary function of reviewing a landfill proposal for consistency with the regional SWMP should be conducted by an entity that is (1) qualified to perform the assessment, (2) does not have the potential for conflicts of interest, and (3) can assemble and perform their

duties on an infrequent basis is a reasonable alternative to the current process while maintaining the advantages of the current landfill permitting process.

3. Require the applicant to provide fact-based information supporting their proposal to the public and to the HGA prior to HGA decision. Although in practice most landfill permit applicants perform a certain amount of due-diligence prior to submitting an application to the HGA, this is not required by Alabama law (8). As noted earlier and supported by public comments and survey responses, the public perceives the ability of the HGA to evaluate the need and appropriateness of a landfill proposal to be limited. This perception has some legitimacy, since such proposals are infrequent, and HGA representatives are for the most part not well-versed in the varied types and sources of technical, social and economic data necessary to perform such an evaluation. Some comparison states acknowledge this issue by requiring applicants to provide various types of information to the HGA and/or state agencies prior to the HGA making a decision to approve or deny a proposal (Tables 12-15). In some comparison states, agencies have the responsibility to review and approve or disapprove this information prior to a decision to a proposal moving forward in their process. Maintaining the separation between the HGA and RPC (or other construct) and ADEM is advantageous to Alabama's landfill permitting process for a number of reasons previously noted. Thus, a reasonable alternative is to require the applicant to provide fact-based information sufficient to allow the public to understand the basis of need and rationale for the proposed landfill, and the predicted positive and negative consequences to the environment and community resulting from the proposed landfill. Including requirements for the applicant to provide a fact-based assessment of need, and then to present their proposal in an open public forum, would address many of the concerns noted during the public meetings held as part of this study, and would also provide the local HGA with the information necessary to make an informed decision on the proposal (Figure 28). Determining what constitutes the appropriate type of information, and how this information should be organized, is beyond the scope of this report. However, at a minimum this information should specifically address the six factors a local host government must consider in determining whether to approve a permit application (8), should also address the environmental suitability of the proposed site for the proposed landfill, and should provide

realistic, fact-based estimates of the economic benefits and drawbacks of the proposed landfill. A potential role for ADEM in this process could be defining what this fact-based needs assessment should include (in partnership with other appropriate state agencies, e.g., Alabama Department of Public Health, and Alabama Department of Transportation) and the identification and certification of qualified contractors within the state with the necessary expertise to perform this function.

The requirement for the applicant to providing notice and presenting results of the fact-based needs assessment in a public meeting is similar to the process followed under federal law for hazardous waste landfills. As envisioned for Alabama's landfill permitting process, a public meeting prior to the HGA assessment of need, public hearing, and decision provides an opportunity for the public to become informed of the applicants intent, and be presented with the information used by the applicant to support their proposal earlier in the permitting process. This public notice and public meeting requirement would not replace the public hearing function presently in Alabama's landfill permitting process; rather, it would require the applicant to present fact-based information supporting their proposal to the public and to the HGA early enough in the permitting process to contribute in a meaningful way to the decision-making process.

Conclusions

Results of this study suggest the following potential enhancements to Alabama's solid waste permitting process: (1) change the 90-day default approval; (2) evaluate the RPC as the entity assessing consistency of a proposal with the regional SWMP; and (3) require the applicant to provide fact-based information supporting their proposal to the public and to the HGA prior to a HGA decision. These potential enhancements to Alabama's landfill permitting process in theory are straightforward, but from a practical perspective are likely to be challenging. One potential response to these proposed enhancements is to do nothing—this alternative would not leave the current process unmanageable, since in fact there are several advantages to the current process which make Alabama's methodology more efficient than those of other states. However, results from the public meetings held during this study clearly support the proposed

enhancements, as do other information presented in this report, including examples from other states. The approach used here is to first ensure that the advantages in the current process are not lost. With this in mind, the details underlying the proposed enhancements are largely yet to be determined. Further, the proposed enhancements do not require changes to the authorities and responsibilities of the HGA or ADEM; rather, they place added responsibilities on the applicant to provide the appropriate information and notice to the public and HGA in a timely fashion and in a way that allows the HGA to benefit in their decision-making role. Perhaps the most significant proposed enhancement is the replacement of the RPC function with some other construct vested with the authority and responsibility to perform the current RPC function. The alternative to this is to leave the RPC function as it stands today; however, if this is done, then an investment in resources and training is necessary to ensure that the RPC's are capable of performing this role in a way that the public views is technically sound and without potential conflicts of interest.

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