



The State Senate

Senate Research Office

Jill C. Fike
Director

204 Paul D. Coverdell Legislative Office Building
18 Capitol Square
Atlanta, Georgia 30334

Telephone
404-656-0015

Brian Scott Johnson
Deputy Director

Fax
404-657-0929

**FINAL REPORT OF THE SENATE
SEPTAGE DISPOSAL STUDY COMMITTEE**

COMMITTEE MEMBERS

Honorable John Bulloch, Chairman
Senator, 11th District

Honorable Ross Tolleson
Senator, 20th District

Honorable Johnny Grant
Senator, 25th District

Honorable James L. Whitehead, Sr.
Senator, 24th District

Mr. Don Barfield
AAA Concrete Products Corporation

Mr. Michael Carter
Paulding County Water System

Mr. Ernest U. Earn
Environmental Protection Division

Mr. Keith A. Higgs
Douglasville-Douglas County Water & Sewer Authority

Mr. Tom Neff
Sierra Club

Mr. Scott Alan Uhlich
Department of Human Resources

Ms. Suzanne P. Williams
Home Builders Association of Georgia

Prepared by the Senate Research Office

2006
TABLE OF CONTENTS

INTRODUCTION 3

BACKGROUND..... 3

REGULATION OF SEPTAGE DISPOSAL IN GEORGIA 4

COMMITTEE FINDINGS 4

COMMITTEE RECOMMENDATIONS..... 6

INTRODUCTION

The Senate Septage Disposal Study Committee was created by Senate Resolution 818 in the 2006 Legislative Session of the Georgia General Assembly. Recognizing the environmental and health hazards associated with illegal disposal of septage in creeks, streams, and unimproved land due to the lack of septage disposal facilities in the State, the Committee was charged with studying available options and solutions for septage disposal.

The Committee was composed of 11 members, consisting of four members of the Senate. The Senators serving on the Committee were: Senator John Bulloch, serving as Chairman; Senator Johnny Grant, Senator Ross Tolleson, and Senator Jim Whitehead, Sr. Other esteemed members included: Mr. Don Barfield, AAA Concrete Products Corporation; Mr. Michael Carter, Director, Paulding County Water & Sewer Authority; Mr. Ernest U. Earn, Implementation Coordinator, Watershed Protection Branch, Georgia Environmental Protection Division; Mr. Keith A. Higgs, Operations Manager, Douglasville-Douglas City Water & Sewer Authority; Mr. Tom Neff, Georgia Chapter Chairman, Sierra Club; Mr. Scott Alan Uhlich, Program Director, Land Use Unit, Environmental Health Section, Georgia Department of Human Resources; and Ms. Suzanne P. Williams, Home Builders Association of Georgia.

Additionally, the legislative staff members assigned to the Committee were: Ms. Leah Tatum-Dick, Administrative Assistant to Senator John Bulloch; Mr. Chris Bailey of the Senate Press Office, and Mrs. Angie Fiese of the Senate Research Office.

The Committee held three meetings. The first meeting was an organizational meeting held in Atlanta on July 10th, 2006. The second meeting was held in Albany on August 29th. At this meeting, the Committee heard testimony from Mr. Keith A. Higgs, Operations Manager for the Douglasville-Douglas County Water & Sewer Authority; Mr. Ernest U. Earn, Implementation Coordinator, Watershed Protection Branch, Georgia Environmental Protection Division; and Mr. Mel Jones, Environmental Health Program Director for the Southwest Georgia Health District. The final meeting was held on December 6th at the Douglasville-Douglas County Water & Sewer Authority Administrative Building. The Committee discussed recommendations and toured the Sweetwater Creek Wastewater Treatment Plant.

BACKGROUND

Septic systems are used to treat and dispose of small volumes of wastewater, usually from homes or businesses that are located relatively close together. Septic systems are also referred to as on-site wastewater treatment systems and private sewage systems. Septage is the liquid and solid material periodically removed from a septic tank, cesspool, portable toilet, or similar treatment works that receive only domestic sewage. It does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial or industrial wastewater, and does not include grease removed from a grease trap at a restaurant.¹

There are approximately 2 million active septic tank systems in Georgia. Safe disposal of waste is necessary to protect the health of individuals where public sewerage is not available. Many diseases, such as dysentery and typhoid, are transmitted from one person to another through the fecal contamination of food and water, largely due to the improper disposal of human

¹ Earn, Ernest U. and Oke, Ade. "Septage Management in Georgia" 1995.

wastes. Furthermore, chemical pollutants in individual drinking water supplies have been attributed to groundwater pollution caused by improper subsurface disposal of on-site sewage.

However, the organic matter in septage makes it valuable as a soil conditioner. Some nutrients found in septage may be used as crop fertilizer. Several successful approaches use septage safely, such as careful land application and incorporation into the soil on a non-public access site. Adjusting septage pH is one way to reduce or eliminate odors and disease-causing organisms before land application.

REGULATION OF SEPTAGE DISPOSAL IN GEORGIA

In 1994, the Department of Natural Resources, Environmental Protection Division (EPD) and the Department of Human Resources (DHR), Division of Public Health executed a septage Memorandum of Understanding (MOU) pursuant to the Code of Federal Regulations Title 40, Part 503, regulating proper disposal of septage in Georgia. The MOU allows disposal of septage by: discharge to a wastewater treatment plant; discharge to a separate septage handling facility; or direct land application to land with a low potential for public exposure. This is the land that the public uses infrequently which includes, but is not limited to, agriculture land, forests, and reclamation sites located in unpopulated areas.²

Septage removal permits are issued by a County Board of Health. Disposal treatment at wastewater treatment plants and separate septage handling facilities are regulated by the wastewater treatment plant and in some cases through the EPD. Requirements for septage disposal by land disposal are as follows: land disposal sites that accept septage from a single pumping and hauling business are regulated through the DHR, and land disposal sites that accept septage from more than one pumping and hauling business are regulated through the EPD. All new land disposal sites regulated by EPD or local county boards of health thru DHR must be approved by both the local government and EPD.

COMMITTEE FINDINGS

Disposal of Septage to a Wastewater Treatment Plant

Wastewater treatment plants offer one option for septage disposal. However, because septage is approximately 50 times as concentrated as domestic sewage, it must be blended with sewage before entering the plant to avoid disturbing the treatment process. The plant must have a method of feeding septage into the system at a controlled rate and have adequate capacity to handle the septage.

Benefits of adding septage to a treatment plant include: revenue for the treatment plant; use of excess treatment plant capacity; year-round availability for haulers; and full-service treatment, serving both sewered and unsewered areas in a community. Concerns surrounding the addition of septage into a treatment plant must also be addressed: the daily volume of septage may need to be managed to avoid plant overload and permit compliance challenges; restricting the hours of septage receiving, or limiting the number of loads per day may be necessary to control the plant loading rate; the plant may not be prepared to handle industrial wastes, grease-trap wastes, or other unusual materials; and the treatment plant should have a contract or require permits with all approved haulers.³

² Id.

³ Id.

Disposal of Septage to a Separate Septage Handling Facility

The Committee toured one wastewater treatment plant in the State that offers a separate septage receiving site. The Douglasville-Douglas County Water and Sewer Authority (WSA) was created by the Georgia Legislature in 1985. The Authority is an independent agency, not part of the city or county government. WSA is not supported by tax dollars; rather, its operating funds come from payments for services provided to WSA customers. WSA policies are set by a Board of Directors composed of the Mayor of Douglasville, the Chairman of the Douglas County Board of Commissioners and interested local residents appointed on a rotating basis by the Mayor and Douglasville City Council and the Douglas County Board of Commissioners. The WSA provides water and sanitary sewer service to more than 90,000 residents.⁴

In 1991, the General Assembly passed local legislation authorizing the WSA to regulate maintenance of septic systems. The WSA requires septic tanks installed in the Dog River Basin Water Supply Watershed to be pumped every five years. This requirement is stipulated in the customers' water service contracts and failure to comply with such requirement will result in water service shut-off.

The WSA retrofitted the Sweetwater Creek Wastewater Treatment Plant with a septage-receiving unit at an initial cost of \$36,000 and charges pumpers/haulers a fee to dispose of the septage at the site. In addition to and following the receiving unit, the plant contains a dewatering process that separates the solids and sends the liquids through the wastewater treatment process. This part of the plant was already in existence prior to the installation of the septage-receiving unit. The WSA requires a manifest and has staff spot-checking septage loads and determining the origination of the loads.⁵

Land Application of Septage

Land disposal or "applied to the land" is defined under EPD Rule 391-3-6-.23 as " the spraying or spreading of septage on the land surface; the injection of septage below the land surface; or the incorporation of septage into the soil at agronomic rates for the purpose of soil conditioning or fertilization of crops or vegetation grown in the soil."

Careful land application of septage follows four general guidelines: to reduce odors and vattraction; reduce human contact with disease-causing organisms; protect ground and surface water; and maximize absorption of plant nutrients. As stated above, the DHR regulates land disposal sites that accept septage from one pumping and hauling business and the EPD regulates land disposal sites that accept septage from more than one pumping and hauling business. Currently in Georgia, there is one land disposal site located in White County that can accept septage from numerous pumping/hauling businesses.

The Director of the Environmental Protection Division, pursuant to EPD Rule 391-3-6-.23, issues Land Application System (LAS) permits for land disposal sites which accept septage from more than one pumping/hauling business. Under EPD Rule 391-3-6-.23, promulgated pursuant to O.C.G.A. § 12-8-41, a person is prohibited from operating a land disposal site without obtaining a permit from the EPD. Furthermore, the EPD cannot issue a permit without approval by the governing authority of each county or counties in which such site is wholly or partially located. Such approval must be in the form of an adopted resolution and the EPD is prohibited from reviewing an application for a permit until such resolution is submitted to EPD.

⁴ Douglasville-Douglas County Water & Sewer Authority website. <http://www.ddcwsa.com>

⁵ Testimony of Mr. Keith A. Higgs at the August 29th meeting in Albany.

Under the Rule, disposal of domestic septage by land disposal can only occur on land with a low potential for public exposure and prior to the issuance of a land disposal permit, the applicant must submit and obtain approval of a septage management plan. In addition, prior to issuance or a permit, a public notice is required to inform the local populace of the planned land disposal site.

The MOU between the EPD and the DHR stipulates specific management practices and recording requirements for disposal by land application. Any person who applies septage to land must maintain the following information for five years and such information must be available for inspection by either the EPD or DHR: the location of each site on which septage is applied; the number of acres in each site; the date and time septage is applied to each site; the crop or vegetation grown on each site; the rate in gallons per acres per year at which septage is applied to each site; a certification statement; a description of how the management requirements are met; the name and signature of the person who applied the septage; and compliance requirements.⁶

COMMITTEE RECOMMENDATIONS

The Committee recognizes that the Environmental Protection Division (EPD) has the relevant expertise and skill to review and issue land disposal permits. The Committee, therefore, recommends that the General Assembly consider amending O.C.G.A. § 31-2-8 by removing the provision requiring local governmental approval of land disposal permits and, thus, allowing the EPD final approval of such permits. The Committee also recommends that the EPD become the permitting entity for all current and new land disposal sites, whether or not such sites receive septage from one or more pumping/hauling businesses. New facilities will be required to obtain an EPD permit and existing facilities currently permitted by the Department of Human Resources (DHR) will have a transition period of up to five years to comply and transfer to an EPD permit.

The Committee also encourages the General Assembly to provide sufficient funding for the Georgia Environmental Facilities Authority to administer a grant program and/or loans for local government to begin accepting septage. The Committee recognizes the costs associated with septage disposal and, therefore, encourages local governments to regionalize and form public-private partnerships in an effort to provide such services at a reasonable cost and location.

The Committee also recognizes that illegal dumping poses an environmental and health hazard to the citizens of the State and recommends that the DHR strengthens its septage disposal manifest system to require that septage pumpers/haulers maintain manifests. Further, the Committee recommends the General Assembly study various penalty options, including criminal penalties, for illegal dumping.

The Committee recognizes that as a result of these recommendations, both EPD and DHR will have an increased workload and the Committee recommends that both agencies receive adequate funding for additional staff positions to efficiently manage the workload.

Finally, the Committee recognizes that the issues regarding septage disposal are of relative significance to statewide water management planning and encourages the Water Council to address these issues in the Statewide Water Management Plan.

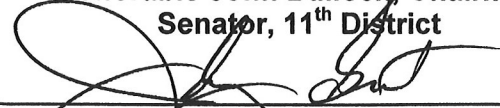
⁶ "Septage Management in Georgia."

Respectfully submitted,

THE SENATE SEPTAGE DISPOSAL STUDY COMMITTEE



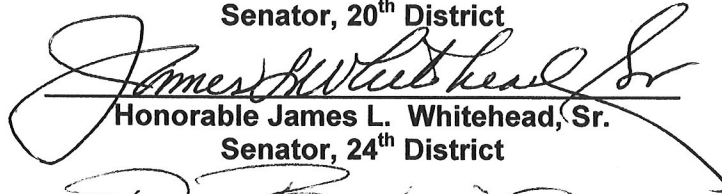
Honorable John Bulloch, Chairman
Senator, 11th District



Honorable Johnny Grant
Senator, 25th District



Honorable Ross Tolleson
Senator, 20th District



Honorable James L. Whitehead, Sr.
Senator, 24th District



Mr. Don Barfield
AAA Concrete Products Corporation



Mr. Michael Carter
Paulding County Water System



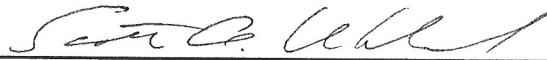
Mr. Ernest U. Earn
Environmental Protection Division



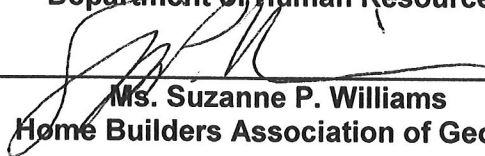
Mr. Keith A. Higgs
Douglasville-Douglas County Water & Sewer Authority



Mr. Tom Neff
Georgia Chapter Chairman, Sierra Club



Mr. Scott Alan Uhlich
Department of Human Resources



Ms. Suzanne P. Williams
Home Builders Association of Georgia