

**QUEEN ANNE'S COUNTY
COMPREHENSIVE SOLID WASTE PLAN
2015 – 2025**



QUEEN ANNE'S COUNTY DEPARTMENT OF PUBLIC WORKS

MAY 2015

Public Hearing Date: May 12, 2015 9:20 AM

Official Adoption Date: May 12, 2015

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**QUEEN ANNE'S COUNTY
SOLID WASTE MANAGEMENT PLAN
2015 – 2025**

QUEEN ANNE'S COUNTY COMMISSIONERS

**JAMES J. MORAN, PRESIDENT
VACANT, VICE-PRESIDENT
STEPHEN WILSON
ROBERT CHARLES BUCKEY
MARK A. ANDERSON**

GREGG A. TODD, COUNTY ADMINISTRATOR

MARGIE HOUCK, EXECUTIVE ASSISTANT TO THE COMMISSIONERS

QUEEN ANNE'S COUNTY OFFICIALS

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JOHN E. NICKERSON, DIRECTOR OF ENVIRONMENTAL HEALTH
HELEN SPINELLI, PRINCIPAL PLANNER, PLANNING & ZONING
CONNIE A. TOULSON, RECYCLING & REFUSE MANAGER**



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TABLE OF CONTENTS

List of Figures, Tables & Maps ix
 Resolutionxi
 Adoption Letter.....xiii
 Letter of Approval, Department of the Environment xv
 Introduction 1
 Definition: The Comprehensive Solid Waste Management Plan 3
 Previous Comprehensive Solid Waste Management Plans 4
 Public Input Process 5
 Chapter One: Goals and Regulatory Framework 7
 Comprehensive Solid Waste Management Plan Goals and Objectives 9
 Comprehensive Land Use Plan Conformance 9
 County Government Organization 9
 Laws and Regulations Affecting the Solid Waste Plan 10
 Chapter Two: County Background Information 15
 Present and Projected Population 17
 Municipalities and Federal Facilities 18
 Zoning Requirements 19
 Status of Comprehensive Land Use Plan 19
 Chapter Three: Existing Solid Waste Management 21
 Existing and Projected Solid Waste Generation 23
 Solid Waste Entering/Leaving Queen Anne's County 27
 Existing Solid Waste Collection Systems 28
 Municipal Solid Waste Collection Programs 28
 Private Solid Waste Haulers 30
 Existing Rural Solid Waste Collection Points 32
 Queen Anne's County Rural Solid Waste Collection Points 32
 Regional Solid Waste Acceptance Facilities 44
 Private Solid Waste Acceptance Facilities 46
 Drop-Off (Igloo) Recycling Centers 49
 Public School Recycling 49
 Fluorescent and Compact Fluorescent Light Recycling 55

Apartment Building and Condominium Recycling Program	56
Chapter Four: Assessment of Solid Waste Management Alternatives	61
Assessment of Solid Waste Management Needs	63
Disposal – Municipal Waste	63
Disposal – Rubble	63
Collection Systems	64
Constraints on New Solid Waste Acceptance Facilities	64
Topography	64
Soil Types	65
Geologic Conditions	66
Location	66
Aquifers	67
Wetlands	68
Surface Waters, Flood Plains, and Water Quality	68
Detailed Procedures for Siting New Solid Waste Disposal Facilities	69
First Level Screening for Solid Waste Disposal Facilities	70
Second Level Screening for Solid Waste Disposal Facilities	71
Third Level Screening for Solid Waste Disposal Facilities	72
Land Use and Growth Patterns	73
Asbestos Disposal Capacity	73
Hazardous Waste Accident Response	74
Recycling Programs	74
Chapter Five: Solid Waste Management Plan of Action: 2015-2025	79
Solid Waste Disposal and Acceptance Facilities	81
Management of Waste Streams	82
Sizing, Staging, and Capacity of Solid Waste Facilities	86
Collection Systems	86
Schedule for New Solid Waste Facilities	87
Financing Proposed Solid Waste Facilities	88
Closure Plans	88

Amending and Updating the Plan 88

Summary of Recommendations 89

References 93

Glossary 97

Appendices 105

 Appendix A: MDE 2012 Sludge Generation, Export, and Import Report for Queen Anne’s County ... 107

 Appendix B: Inbound and Outbound Septage Report for the Kent Narrows/Stevensville/Grasonville
Wastewater Treatment Plant (2012-2013) 109

 Appendix C: Monthly Ticket Collection Data for 2013; by Drop-off Center 111

 Appendix D: CY2012 MDE Reports - MRSWF 113

 Appendix F: Drop-Off (Igloo) Recycling Centers 124

 Appendix G: Agencies and Businesses Serviced by County Recycling Pick-Up 125

 Appendix H: Current Landfill Tipping Fee Schedule at MRL 127

 Appendix I: MRSWF CY2012 Commodities (in Tons) 129

 Appendix K: CY2012 MDE Reports – R.B. Baker & Sons, Inc. Rubble Landfill 132

 Appendix L: Maryland Source Reduction Diversion Rate Summary 139

 Appendix N: Public Hearing Record and Comments 142



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LIST OF FIGURES, TABLES & MAPS

Figure 1-1: Organization Chart: Solid Waste Management in Queen Anne’s County.....	12
Figure 1-2: Organization Chart: Solid Waste Management Employees	13
Table 2-1: Historic and Projected Population Growth.....	i
Table 2-2: Historical and Projected Household Growth.....	17
Table 2-3: Historical and Projected Household Size for Queen Anne’s County.....	18
Table 2-4: Populations of Queen Anne’s County Municipalities (2010 Census)	18
Table 3-1: Annual Waste Generation of Queen Anne’s County	24
Table 3-2: 2012 Sludge Generation in Queen Anne’s County.....	26
Chart 3-3: Ticket Book Sales versus Tipping Fees – FY2004 to FY2012	34
Table 3-4: MSW Collected by Individual County Drop-off Centers (in Tons)	35
Table 3-5: Rubble Collected by Individual County Drop-off Centers (in Tons).....	35
Table 3-6: Solid Waste Data for Midshore Regional Solid Waste Facility Generated From the Midshore Region– FY2012	45
Table 3-7: R.B. Baker & Sons, Inc. Rubble Landfill Receipts – 2008 to 2012.....	47
Table 4-1: Level I Screening for Solid Waste Disposal Facility Sites Probable Exclusionary Constraints	70
Table 4-2: Level II Screening Constraints for Solid Waste Disposal Facility Sites Qualitative and Quantitative Constraints.....	71
Table 4-3: Site Specific Criteria	72
Table 4-4: Prices for OCC.....	77
 Map A: Location of Municipal Boundaries and Solid Waste / Recycling, Collection and Disposal Sites within Queen Anne’s County.....	 Back of Plan



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Resolution

15-05

RESOLUTION ADOPTING A COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN FOR QUEEN ANNE'S COUNTY, MARYLAND

WHEREAS, Queen Anne's County, ("the County") pursuant to COMAR TITLE 26 SUBTITLE 03 CHAPTER 03 titled "Development of County Comprehensive Solid Waste Management Plans", is required to develop and implement a decennial Solid Waste Plan; and

WHEREAS, the County desires to promote sound and ecologically-friendly solid waste management practices which give due consideration to the future solid waste requirements of the County; and

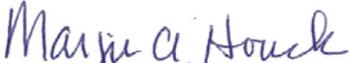
WHEREAS, the County has conducted a community needs assessment and has solicited and reviewed citizen comments and concerns and has addressed such with due diligence; and

WHEREAS, a public hearing was held with respect to the proposed plan on May 12, 2015.

NOW, THEREFORE, the County Commissioners of Queen Anne's County hereby adopt the attached 2015-2025 Comprehensive Solid Waste Management Plan in accordance with the provisions of COMAR TITLE 26 SUBTITLE 03 CHAPTER 03, and shall submit the same to the Maryland Department of the Environment for their consideration and approval.

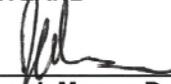
DONE AT CENTREVILLE, QUEEN ANNE'S COUNTY, MARYLAND, THIS 12th DAY OF May, 2015.

ATTEST:

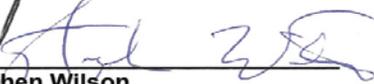


Margie Houck
Executive Assistant

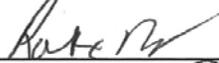
THE COUNTY COMMISSIONERS OF
QUEEN ANNE'S COUNTY,
MARYLAND



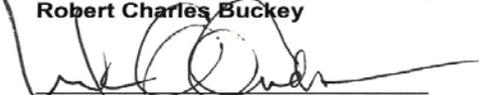
James J. Moran, President



Stephen Wilson



Robert Charles Buckey



Mark A. Anderson

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**Queen
Anne's
County**

County Commissioners:

James J. Moran, At Large
Vacant, District 1
Stephen Wilson, District 2
Robert Charles Buckey, District 3
Mark A. Anderson, District 4

**THE COUNTY COMMISSIONERS OF
QUEEN ANNE'S COUNTY**

The Liberty Building
107 North Liberty Street
Centreville, MD 21617

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County Administrator: *Gregg A. Todd*

Executive Assistant to County Commissioners: *Margie A. Houck*

County Attorney: *Patrick Thompson, Esquire*

May 12, 2015

Mr. Horacio Tabalda, Director
Waste Management Administration
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230-1719

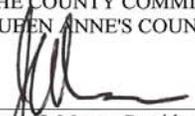
Dear Mr. Tabalda:

Re: Statement of Official Adoption, Queen Anne's County Solid Waste Management Plan

We hereby submit seven (7) copies of the Queen Anne's County Comprehensive Solid Waste Management Plan. This document has been prepared in accordance with the Administration's regulations as contained in COMAR TITLE 26 SUBTITLE 03 CHAPTER 03 titled "Development of County Comprehensive Solid Waste Management Plans."

A formal public hearing on the proposed Comprehensive Solid Waste Management Plan was held by the County Commissioners on May 12, 2015. Notice of this public hearing was given by publication in a local newspaper for three weeks preceding the hearing. Written notice of the hearing was also provided to the Waste Management Administration. A written discussion and summary of the substantive issues raised at the public hearing is included in Appendix N of this plan. This plan has been officially adopted by the County Commissioners on this date.

THE COUNTY COMMISSIONERS OF
QUEEN ANNE'S COUNTY

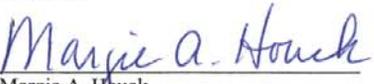

James J. Moran, President


Stephen Wilson


Robert Charles Buckey


Mark A. Anderson

ATTEST:


Margie A. Houck
Executive Assistant to the Commissioners



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LETTER OF APPROVAL, DEPARTMENT OF THE ENVIRONMENT



MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore, MD 21230
410-537-3000 • 800-633-6101 • www.mde.state.md.us

Martin O'Malley
Governor

Robert M. Summers, Ph.D.
Secretary

Anthony G. Brown
Lieutenant Governor

November 7, 2014

Ms. Connie Toulson, Recycling and Refuse Manager
Queen Anne's County Department of Public Works
312 Safety Drive
Centreville, MD 21617

Dear Ms. Toulson:

The Maryland Department of the Environment (the "Department") has completed its review of Queen Anne's County's draft 2015-2025 Solid Waste Management Plan (the "Plan"). The county developed and forwarded the Plan to the Department for its review and approval as required by Section 9-503(a) of the Environment Article, Annotated Code of Maryland. The Department received the Plan on August 11, 2014.

Based on this review, the Department has determined that the Plan will satisfy the requirements of Section 9-503(a) of the Environment Article and the Code of Maryland Regulations (COMAR) 26.03.03 provided that the following changes are made to the Plan. In accordance with Section 9-507(a) of the Environment Article, the Plan is tentatively approved for county to move forward with adopting the Plan. Per Section 9-503(a) of the Environment Article, each county shall have a plan approved by the Department. The plan should be in effect prior to the expiration of the existing plan. Hence, the adopted Plan should be submitted to the Department for its review and final approval as soon as possible after the Plan adoption by the county.

General Comments

1. The page footer for the Plan, "Draft August 2014 – Solid Waste Management Plan" should be replaced with "Solid Waste Management Plan 2015 – 2025".
2. Remove Table 3-3, "Existing and Projected Solid Waste Generation in Tons – Queen Anne's County, Maryland", from the Table of Contents. Add a title for Table 3-1: "Annual Waste Generation of Queen Anne's County". Update the sequential numbering of tables in the Table of Contents and in the text.
3. Add Resolution and Adoption Letter to the Table of Contents, pages XI and XIII, respectively.
4. Add a descriptive title to Map A: "Location of Municipal Boundaries and Solid Waste / Recycling, Collection and Disposal Sites within Queen Anne's County".

Chapter One – Goals and Regulatory Framework

1. On Page 9, line 3 of paragraph 2, correct the page numbers corresponding to Figures 1-1 and 1-2 to Pages 11 and 12.
2. On Page 9 under “Laws and Regulations Affecting the Solid Waste Plan” in paragraph 3, correct the Section cited for scrap tire recycling program to “(9-228)”.

Chapter Two – County Background Information

1. On Page 18, under “Zoning Requirements,” add the sentence, “This plan shall not be used to create or enforce local land use and zoning requirements.” Also, subsequent zoning information in the Plan should refer back to this statement.
2. On Page 18, modify “The following map shows . . .” to “Map A (Foldout – Back of Plan) shows the location of municipalities within Queen Anne’s County.”
3. On Page 19, under section “Status of Comprehensive Land Use Plan”, remove the discussion of Midshore Regional Solid Waste Facility beginning “Relative to Solid Waste Management. . .” through the last bullet on this page. Though this information is not necessary in the 2015 – 2025 Plan, it may be discussed in Chapter Five “Solid Waste Management Plan of Action: 2015 – 2025”. If the discussion of Midshore Regional Solid Waste Facility is included in Chapter Five: under “The following criteria should be used when conducting a feasibility study. . .”, replace the second bullet with “Detailed procedures for locating a new facility and Level I, II and III Screening as outlined in Chapter 4, beginning on Page 59 of Queen Anne’s County Comprehensive Solid Waste Management Plan for planning period 2015 – 2025.”
4. On Page 20, move Sections “Solid Waste Issues” and “Solid Waste Policy 1A” to Chapter Three and Five of the Plan, respectively.

Chapter Three – Existing Solid Waste Management

1. In Chapter 3, for each solid waste acceptance facility in Queen Anne’s County, estimate the anticipated years of service life remaining.
2. On Page 33, change the titles “Existing Solid Waste Acceptance Facilities” and “Queen Anne’s County Solid Waste Acceptance Facilities” to read “Existing Rural Solid Waste Collection Points” and “Queen Anne’s County Rural Solid Waste Collection Points”, respectively. The facilities discussed in this section are not Solid Waste Acceptance Facilities as defined in COMAR 26.04.07.02(29). Additionally, remove the term “transfer station” from the title of the facilities discussed in the Section. The facilities do not possess a Refuse Disposal Permit and do not comply with the definition of a “transfer station” as defined in COMAR 26.04.07.02(32).

Chapter Four – Assessment of Solid Waste Management Alternatives

1. Discuss the feasibility of solid waste composting in accordance with the requirement in Section 9-1703(b)(7) of the Environment Article, Annotated Code of Maryland.
2. On Page 69, move Section “Public School Recycling” to Chapter Three “Existing Solid Waste Management”. Public School Recycling is an ongoing program and not an “Assessment of Solid Waste Management Alternatives”.
3. On Page 74, move Section “Fluorescent and Compact Fluorescent Light Recycling” to Chapter Three “Existing Solid Waste Management”. Fluorescent and Compact Fluorescent Light Recycling is an ongoing program and not an “Assessment of Solid Waste Management Alternatives”.
4. On Page 76, move Section “Apartment Building and Condominium Recycling Program” to Chapter Three “Existing Solid Waste Management”. The ABCR program is an ongoing program and not an “Assessment of Solid Waste Management Alternatives”.

Chapter Five – Solid Waste Management Plan of Action: 2015 – 2025

1. The page header for Chapter Five, “Chapter Five – Solid Waste Management Plan of Action: 2004 – 2014” should be replaced with “Chapter Five – Solid Waste Management Plan of Action: 2015 – 2025”.
2. On Page 83, in the first sentence under “Management of Waste Streams”, update the referenced table to Table 3-1 (Existing and Projected Solid Waste Generation).
3. On Page 88, under Section “Schedule for New Solid Waste Facilities” in the second paragraph, clarify the term “transfer station” in relation to the definition of “transfer station” in COMAR 26.04.07.02(32).

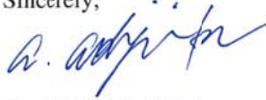
Be advised that before the county adopts the Plan, the county is required to comply with the requirements of Section 9-506 (1) of the Environment Article, concerning submittal of the Plan to the county’s planning agency for its certification of the Plan. Once the Plan has been revised and adopted by Queen Anne’s County Council in accordance with Section 9-503(d) of the Environment Article, the county must submit the adopted Plan to the Department for its review and distribution to the Departments of Natural Resources, State Planning, and Agriculture. Be advised that COMAR 26.03.03.F(3) requires the county to submit seven copies of the adopted Plan to the Department for its final review. The Department, however, determined that in order to complete the post adoption review of the Plan, the Department would need four copies; one for its review and three copies for distribution to other agencies. If the Department determines that there is a need for additional copies to complete the final review of the Plan, the Department will notify you and may request the additional three copies.

Please note that Sections 9-503(c) and (d) of the Environment Article and COMAR 26.03.03.05C specify required public hearing procedures for amendments to the Solid Waste Management Plans. There have been cases where amendments to the plans were invalidated because of failure to follow the public hearing process. The Department can not authorize a county or Baltimore City to violate any State law or regulation, or local law, policy, or procedure when adopting plan revisions.

Ms. Connie Toulson
Page 4

Thank you for your continuing interest and cooperation in providing sound and long-term solid waste management planning for the county. If you have questions or need additional clarification on these matters, please contact Ms. Julia Mooney, at (410) 537-3143 or julia.mooney@maryland.gov or you may contact me, at (410) 537-4142 or dave.mrgich@maryland.gov.

Sincerely,



David Mrgich, Chief
Waste Diversion Division

cc: Julia Mooney, Land Management Administration

INTRODUCTION

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Definition: The Comprehensive Solid Waste Management Plan

“Solid waste management” as used in this Plan means those activities that provide for the collection, separation, storage, transportation, processing, treatment, re-use, or disposal of solid waste. “Solid waste” is the formal term for what we refer to as “garbage” or “trash” in our daily lives. However, solid waste has a broader meaning, which encompasses many of the unwanted by-products of our modern society. In addition to the trash and garbage produced in our homes, solid waste includes any refuse, sludge, or liquid from industrial, commercial, mining, agricultural, or community activities.

Solid waste is material that has served its useful purpose and now has been, or soon will be, discarded. At this point it enters into the “waste stream.” It may be temporarily stored, but will ultimately flow to a final end such as burial in a landfill, incineration, or recycling into a new product.

The purpose of this Comprehensive Solid Waste Management Plan is to provide a comprehensive strategy for managing the solid waste stream in Queen Anne’s County during the next 10 years. The Plan includes the following major items:

- Queen Anne’s County goals regarding solid waste management.
- The objectives and policies necessary to achieve these goals.
- Discussion of relevant Federal, State, and local laws and regulations.
- Present and projected population.
- Current zoning requirements as they relate to solid waste management.
- Discussion of the current status of the County Comprehensive Land Use Plan.
- Solid waste generation, existing and 10 year projected, by type of waste.
- Types and quantities of waste entering and leaving the County.
- Description of existing solid waste collection systems.
- Description of existing public and private solid waste acceptance facilities.
- Assessment of needs for solid waste disposal systems during the next 10 years.
- Constraints imposed by topography, soils, wetlands, growth patterns, etc.
- Recycling options, including source separation, reduction, and recovery.
- Ten-year plan of action for all types of solid waste and facilities.
- Mechanisms for managing the waste stream.
- Schedule for new or improved solid waste facilities.
- Provisions and methods for financing proposed systems.
- Procedures for updating and amending this Plan on a three-year cycle.

Legal Requirements and Authority

Maryland law requires that each county maintain a current, comprehensive solid waste management plan that covers at least the following 10-year period. The regulations of the Department of the Environment establish detailed requirements for the plan.

A comprehensive solid waste management plan would be important to Queen Anne's County even if not required by State law. Solid waste collection and disposal is a critical and costly public service. Protection of the environment and community values require that solid waste be properly handled, transported, and disposed. Recycling and utilizing other management techniques can accomplish conservation of resources, energy, and disposal capacity.

The original Comprehensive Solid Waste Management Plan for Queen Anne's County was adopted in 1974. Supplements were prepared in 1976 and again in 1985. These plans are now dated. A subsequent Plan was drafted in 1996, however it was never formally adopted. There have been major changes in State and Federal laws governing solid waste disposal and environmental protection in general. New cooperative regional programs have been created such as the Midshore Regional Solid Waste Facility and the Midshore Regional Recycling Program. The last solid waste plan was formally adopted in 2004.

Previous Comprehensive Solid Waste Management Plans

The original Queen Anne's County Comprehensive Solid Waste Management Plan was prepared by Nassaux-Hemsley, Inc. of Chambersburg, Pennsylvania and adopted in 1974. Among the recommendations of this original plan was that the County establish a "green box" system with bulk containers placed within a three (3) mile radius of population centers.

The Master Solid Waste Plan, 1976 Supplement, was the next update. It was prepared by the Queen Anne's County Department of Public Works and was adopted by the County Commissioners on April 5, 1977. The Plan recommended that the County contract with private haulers for curbside-type collection of domestic solid wastes in special solid waste subdistricts where the density of population justified the establishment of such services. This service has not been established and continues to be an issue as identified by the County staff.

Concurrently with the adoption of the 1976 supplement, several ordinances were also enacted: Ordinance No. 76 provided for establishing solid waste subdistricts and Ordinance No. 77 provided for registration and regulation of refuse collectors (these Ordinances have since been re-codified as our new

Title 25). These two ordinances were developed specifically to assist the County in implementing curbside collection service.

At the time of the 1976 supplement, there were six (6) existing county landfills in operation in Queen Anne's County. The supplement recommended phasing out these existing landfills due to the need to comply with State permit regulations, the high cost of operations, and hydrogeology issues. It was recommended that the County establish one central landfill in the vicinity of Queenstown, and to provide drop-off centers at Grasonville, Batts Neck, Sudlersville and Church Hill.

In 1985 the Department of Public Works prepared the draft Queen Anne's County Master Solid Waste Plan supplement. There is no record that this document was ever officially adopted or approved.

An amendment to the Master Solid Waste Plan was approved in 1991. It included both the 124 acres purchased by the County Commissioners adjacent to the former Centreville Landfill and describes the proposed R. B. Baker and Sons, Inc. rubble landfill located near Queenstown. At that time, the Phase II report had been prepared and submitted to the Department of the Environment for approval. The facility has since been permitted (September 4, 1992) and opened in October 1992.

The 2004 Solid Waste Management Plan was developed in accordance with the requirements of COMAR 26.03.03.03A and was officially adopted by the governing body of the County on October 5, 2004. This plan superseded all previous plans and amendments.

Public Input Process

Copies of the draft plan were sent to all of the incorporated towns for review and comment. The draft plan was also available for the general public to access and review on the County Web Site prior to adoption.

A formal public hearing was held by the County Commissioners on this Comprehensive Solid Waste Management Plan. Notice of this public hearing was given by publication in local newspapers for three weeks preceding the hearing. Written notice of the hearing was also provided to the Maryland Department of the Environment and the incorporated Towns in Queen Anne's County.

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CHAPTER ONE: GOALS AND REGULATORY FRAMEWORK

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Comprehensive Solid Waste Management Plan Goals and Objectives

It is the intent of the Queen Anne's County Comprehensive Solid Waste Management Plan to fulfill the following goals:

1. Protect the overall public health, natural resources and environmental quality of Queen Anne's County.
2. Promote the provision of solid waste collection and disposal services in an economical and efficient manner.
3. Continue an active recycling program with emphasis on the maximum diversion of materials from the waste stream that is economically feasible.
4. Provide planning so that adequate solid waste management facilities will be available during the next 10 years.
5. Comply with State and Federal laws and regulations governing solid waste management.
6. Be consistent with the Comprehensive Plan for Queen Anne's County.
7. Encourage and continue regional cooperation for development of solutions to solid waste and recycling management problems.

Specific objectives and policies to accomplish these goals will be developed and discussed in Chapter Five, which will contain the County Plan of Action.

Comprehensive Land Use Plan Conformance

The Queen Anne's County Commissioners adopted the 2010 Comprehensive Plan for Queen Anne's County on September 7, 2010. Planning staff has participated in the staff management group overseeing this Comprehensive Solid Waste Management Plan update. It is one of the explicit goals of this Comprehensive Solid Waste Management Plan to ensure conformance with the Queen Anne's County Comprehensive Plan.

County Government Organization

The Queen Anne's County Department of Public Works (DPW) has primary responsibility for solid waste management within Queen Anne's County. The Solid Waste Division of the Department of Public Works operates all five residential drop-off centers located within Queen Anne's County. This includes administration, supervision, collection and transport of materials to the Midshore Regional Solid Waste Facility, the R.B. Baker Rubble Landfill, and recycling operations.

The Maryland Environmental Service is an independent State authority (effective July 1, 1993), which operates the Midshore Regional Solid Waste Facilities and Midshore Recycling Consolidation Facilities in Easton and Ridgely.

The Midshore Regional Recycling Program is a cooperative program between Caroline, Kent, Queen Anne's and Talbot Counties to promote recycling by sharing equipment and technical, financial, and other resources on a regional basis. It is funded through a \$5.00 per ton surcharge on the base tipping fee at the Midshore II Regional Solid Waste Facility. This program has been operated by the Maryland Environmental Service since July 2012.

The following organizational chart shows the structure of Queen Anne's County government and related organizations relative to solid waste management. An additional chart is provided of the Solid Waste Division organization (see [Figures 1-1](#) and [1-2](#), Pages 11 and 12).

Laws and Regulations Affecting the Solid Waste Plan

The Maryland General Assembly has enacted laws that govern all aspects of solid waste management including planning, disposal, and recycling. The laws are found in the Annotated Code of Maryland. After the enactment of these laws, the administrative agencies (usually the Department of the Environment), adopt regulations that spell out the specific requirements and procedures for each program. These regulations are found in the Code of Maryland Regulations, or COMAR.

State law that requires the adoption of this Comprehensive Solid Waste Management Plan is found in the Environment Article, Title 9, Subtitle 5 of the Annotated Code of Maryland. The specific requirements of the plan are detailed in COMAR 26.03.03, "Development of County Comprehensive Solid Waste Management Plans."

Title 9 also establishes the State law governing many other aspects of solid waste management including landfill permits (9-204.2), scrap tire recycling program (9-228), sewage sludge (9-230), and recycling (9-1701).

Section 9-211 establishes financial assurance and security requirements for solid waste acceptance facilities. For both sanitary and rubble landfills, a bond or cash guarantee of \$5,000 per acre (minimum \$125,000) is required. For a landfill that accepts only land clearing debris, the bond required is \$2,000 per acre (minimum \$25,000). The term of the bond is the duration of operation of the landfill, plus an additional five years after closing.

COMAR 26.04.07, "Solid Waste Management" contains the detailed regulations on the construction and operation of all solid waste acceptance facilities. This includes municipal landfills, land clearing debris landfills, rubble landfills, industrial waste landfills, processing facilities, transfer stations, and incinerators.

Section 9-228 of the Annotated Code of Maryland prohibits the disposal of scrap tires in a landfill after January 1, 1994. A fee of \$.80 per tire is paid into a fund for establishing tire clean up and recycling

programs. This fee is collected at the retail level and transferred to the Maryland Comptroller of the Treasury. The Maryland Department of the Environment (MDE) was charged with identifying tire stockpiles and requiring them to be recycled. The fees collected were used for grants to counties for clean-up of existing tire stockpiles. The fees collected are also used for Citizen Scrap Tire Drop-off collection events. These events are regulated by MDE and are scheduled as adequate funding allows. The Maryland Environmental Service is tasked with organizing the events with the counties. The events are advertised in the local papers. County residents are allowed to bring 10 tires, without rims, from their residents. MDE pays for all disposal/recycling costs and Queen Anne's County is responsible for all labor costs.

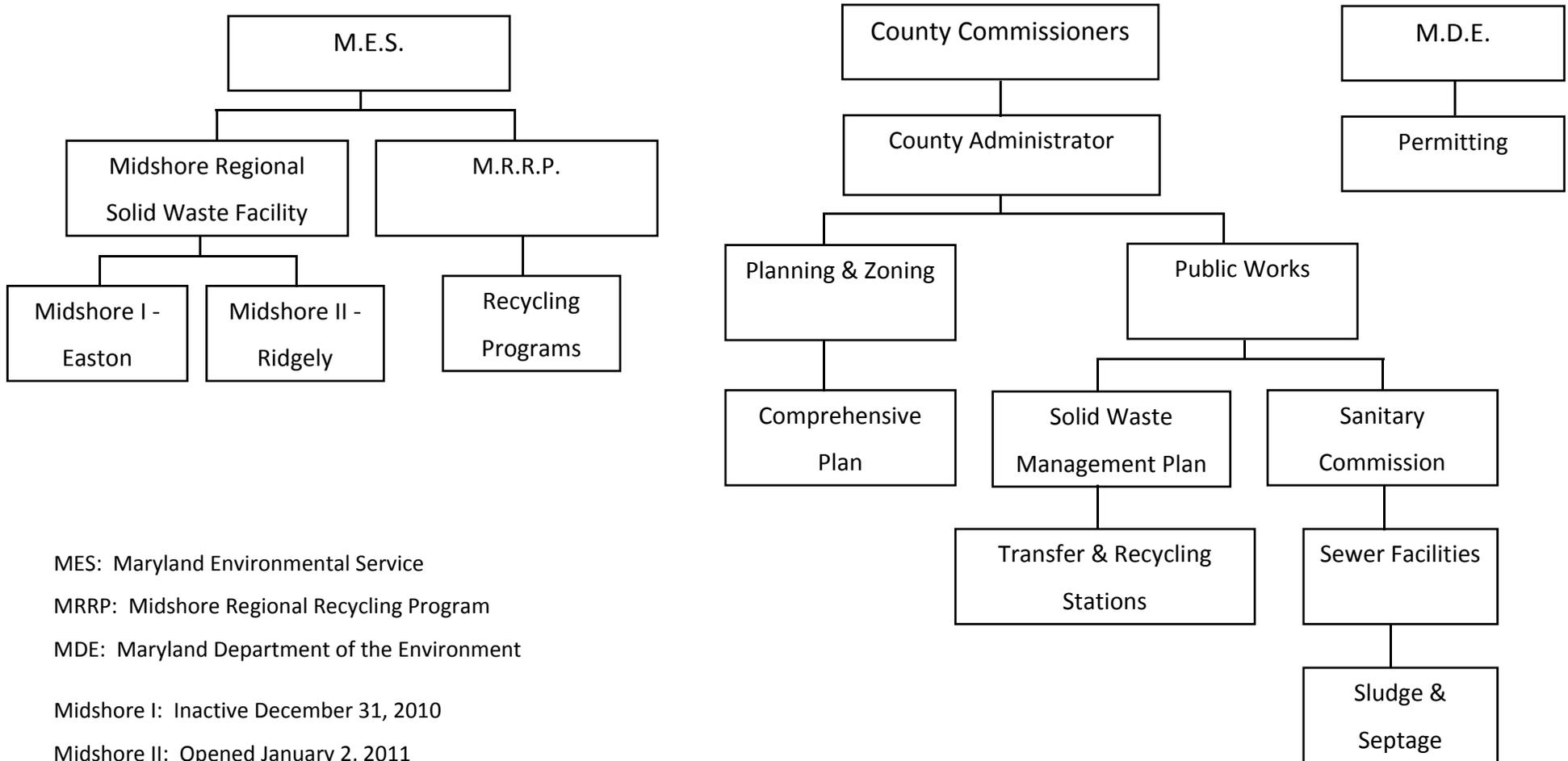
In 2012, the Maryland General Assembly passed the "Recycling Rates and Waste Diversion – Statewide Goals" Act that revises the 1988 Maryland Recycling Act, increasing the mandated recycling rate for Queen Anne's County to 20 percent. The Maryland Recycling Act mandates recycling targets for all counties. Counties with populations less than 150,000, such as Queen Anne's County, are required to recycle at least 20 percent of their solid waste stream by weight by December 31, 2015. Section 9-512 states that a local authority may not issue building permits (except for essential public services) after January 1, 1992 unless the county has an approved recycling plan.

Queen Anne's County developed County Code Title 25, which is applicable to solid waste management. Title 25 gives the Department of Public Works authority to permit and regulate solid waste collection and disposal in the county. Title 25 further authorizes creation of solid waste sub districts (within the sanitary district) to establish "public collection of household refuse" or a curbside collection program. Regulations are included for setting rates and billing.

Title 25 also provides standards for general collection practices and registering private refuse collectors for hauling solid waste in Queen Anne's County. It establishes minimum criteria for equipment and operating procedures and authority for inspections, violations, and penalties.

The Federal government also has laws that affect solid waste management, chiefly the Resource Conservation and Recovery Act (RCRA). Subtitle D, "Municipal Solid Waste Landfill Rules," sets forth many regulations governing the design, construction, operation, closure, and monitoring of "municipal solid waste units". These are defined as facilities that receive "household wastes." Household waste is defined as "any solid waste (including garbage, trash, and sewage waste in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreational areas)." The Federal closure standards do not generally apply if the landfill stopped receiving household waste prior to October 9, 1991. The 30-year monitoring standards do not generally apply if the landfill stopped receiving household waste prior to October 9, 1993.

Figure 1-1: Organization Chart: Solid Waste Management in Queen Anne’s County



MES: Maryland Environmental Service

MRRP: Midshore Regional Recycling Program

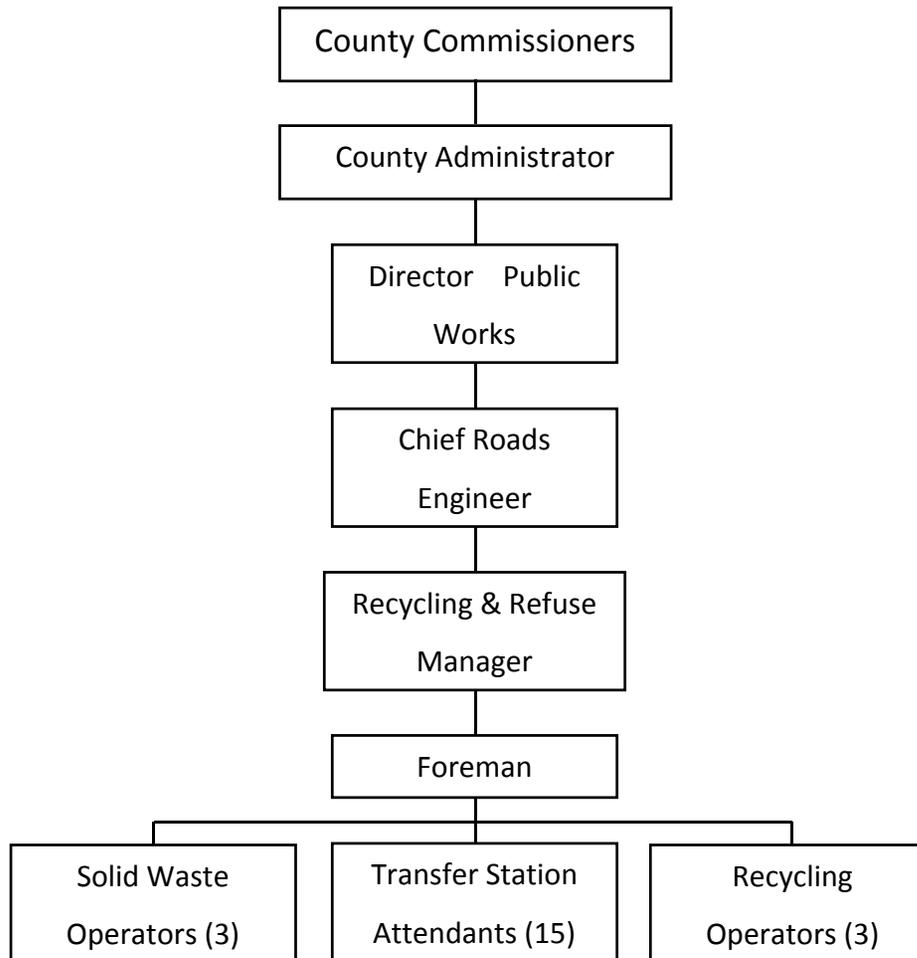
MDE: Maryland Department of the Environment

Midshore I: Inactive December 31, 2010

Midshore II: Opened January 2, 2011

Recycling Programs: Effective July 2012

Figure 1-2: Organization Chart: Solid Waste Management Employees



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CHAPTER TWO: COUNTY BACKGROUND INFORMATION

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Present and Projected Population

The Maryland Department of Planning is required to produce population forecasts for State agencies at a minimum of every three years. The most recent population projections that will be used in this Comprehensive Solid Waste Management Plan are derived from the 2010 census, unless otherwise noted. These projections are shown on Tables 2-1 through 2-4 and include total population, household growth, household size and household projections by election district. The Queen Anne's County Department of Planning and Zoning has assessed the growth trends within the County and has projected population by each election district.

Queen Anne's County has experienced significant population growth since 1970. A continuation of this trend is expected, as shown below using the Maryland Department of Planning projections. As the total population of Queen Anne's County increases, the percentage increase will decline. After 2010, total population increase is also expected to be less.

Table 2-1: Historic and Projected Population Growth

1970	18,422		
1980	25,508	7,086	38.5%
1990	33,953	8,445	33.1%
2000	40,563	6,610	19.5%
2010	47,798	7,235	17.8%
2020	53,600	5,802	12.1%
2030	60,350	6,750	12.6%
2040	65,750	5,400	8.9%

From 2010 to 2040, Queen Anne's County is projected to have a population increase of 17,952 persons, or 37.6 percent.

Table 2-2: Historical and Projected Household Growth

1980	8,850	3,055	52.7%
1990	12,489	3,639	41.1%
2000	15,315	2,826	22.6%
2010	18,025	2,710	17.7%
2020	20,825	2,800	15.5%
2030	23,950	3,125	15.0%
2040	26,325	2,375	9.9%

From 2010 to 2020, total households in Queen Anne’s County (including municipalities) are projected to increase by 2,800 or 15.5 percent. This is slightly greater than the projected percentage increase for total population (12.1 percent). This is due to an anticipated decrease in the average household size from 2.63 in 2010 to 2.55 in 2020 (See Table 2-3 below):

Table 2-3: Historical and Projected Household Size for Queen Anne’s County

1990	2.69	-0.15	-5.3%
2000	2.62	-0.07	-2.6%
2010	2.63	0.01	0.4%
2020	2.55	-0.08	-3.0%
2030	2.50	-0.05	-2.0%
2040	2.47	-0.03	-1.2%

Municipalities and Federal Facilities

Queen Anne’s County has eight incorporated municipalities. Three towns (Millington, Queen Anne and Templeville) are partly located in Queen Anne’s County and partly in the adjoining counties of Kent, Talbot and Caroline, respectively. These towns and their 2010 Census population are shown in Table 2-4, below:

Table 2-4: Populations of Queen Anne’s County Municipalities (2010 Census)

<u>Incorporated Town</u>	<u>2010 Census</u>
Barclay	120
Centreville	4,285
Church Hill	745
Millington	642
Sudlersville	497
Queen Anne	222
Queenstown	664
Templeville	138

In addition to the municipalities shown above, there are several unincorporated Census Designated Places (CDP) in Queen Anne’s County. The CDPs were created for the purpose of presenting census data for an area with a concentration of population, housing, and commercial structures that is identified by name, but is not within an incorporated municipality. The CDPs also do not necessarily correspond to census tract boundaries or block groups. These areas include the Stevensville CDP, Chester CDP, Grasonville CDP, Kent Narrows CDP and the Kingstown CDP with 2010 populations of 6,803, 4,167, 567, 3,425 and 1,733, respectively.

COMAR 26.03.03.02B requires that the Comprehensive Solid Waste Management Plan reference the subsidiary plans of the incorporated municipalities or other entities within the County. Each of the municipalities listed above has its own planning and zoning authority. The subsidiary comprehensive plans of the municipalities are hereby incorporated by reference. However, none of these municipalities has a plan for solid waste management services or facilities. The municipalities provide for residential solid waste collection services only and operate no solid waste acceptance or disposal facilities. A detailed description of each town's solid waste collection service is included in Chapter Three. Map A (Back of Plan) shows the location of municipalities within Queen Anne's County. There are no federal facilities within Queen Anne's County.

Zoning Requirements

The Queen Anne's County Land Use and Development Code (Chapter 18) as amended was adopted in January 2004. The current Land Use and Development Code does not permit solid waste disposal uses in any zoning district in Queen Anne's County. Chapter 18 does however, outline a process to allow exemptions for "public service uses" and provides for a procedure for a Public Service Waiver. This solid waste plan identifies solid waste management as a public necessity along with the goals and objectives necessary to provide the best system or land use alternatives for meeting federal, state, and local regulations. The County Administrator, Planning Commission Chairperson, and the Director of Planning and Zoning have joint authority to grant a waiver for specific "public service uses" such as the Midshore Regional Solid Waste Facility and County-operated transfer/recycling facilities from the requirements of Chapter 18 based on these criteria. This plan shall not be used to create or enforce local land use and zoning requirements.

Status of Comprehensive Land Use Plan

The current Comprehensive Plan was adopted in September 2010 in accordance with Article 66B (now the Land Use Article) of the Annotated Code of Maryland. The document contains 8 sections and 6 appendixes which contain detailed information concerning the build-out of the county's land use plan and the water resources available to the county. The vision expressed in the plan is as follows:

The VISION is to continue the ethic that the County remains a quintessential rural community with the overall character of the County preserved as:

- A predominantly rural county with small towns connected by creeks and county roads through fields and forest – a great place to live;
- A county that encourages agriculture, seafood and maritime industries, tourism and outdoor sports, small business and high tech enterprise – a good place to work;
- A county that is a faithful steward of its natural and cultural heritage – a good neighbor for the Bay and other Eastern Shore counties;
- A county in which development does not impair the quality of life enjoyed by all – a community that protects the expectations and opportunities of all its citizens.

- A county that supports the highest quality of education that seeks to fully prepare its citizens for the future.

The 2010 Comprehensive Plan reflects the updated Community Plans of Chester/Stevensville, Kent Narrows and the jointly adopted Town of Centreville Community Plan. The Designated Growth Area's as represented in the 2010 and are adjusted from the 2002 Comprehensive Plan.

The sections in the Plan represent the required elements for comprehensive planning in the State of Maryland with an additional section dedicated to Town/County Planning Framework. The elements in the plan are as follows: Section 1 Land Use; Section 2 Sensitive Areas, Water Resources, Mineral Recovery; Section 3 Priority Preservation Areas; Section 4 Historic & Cultural Preservation; Section 5 County/Town Planning Framework; Section 6 Economic Development & Tourism; Section 7 Workforce Housing; and Section 8 Community Facilities & Transportation.

CHAPTER THREE: EXISTING SOLID WASTE MANAGEMENT

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Existing and Projected Solid Waste Generation

The waste stream for Queen Anne's County is defined by many complex relationships between the parties that generate, collect, transport, dispose and/or recycle waste. Defining the exact quantity and composition of the waste stream is difficult, a problem which has become more complex as a result of increasing regionalization of disposal sites, waste haulers, and recycling activities. Data on waste origin must be obtained from the acceptance facility, and is subject to the accuracy of record keeping both in the field and in administrative offices. In many cases the only primary source of information on the origin of a waste load is the vehicle driver, who may not have accurate details. As a result, waste stream data must not be viewed as absolute data. Apportioning regional information based on population is another approach that can be used to estimate County activities.

As Queen Anne's County has participated in regional solutions to solid waste management, the distinction between local and other regional solid waste has become obscured. Each truck arriving at the Midshore Regional Solid Waste Facility is weighed and the origin of its load is requested. For loads such as the Drop-off Center containers transported by the Queen Anne's County Department of Public Works, the origin is simple and accurate. However, for commercial haulers, origin may be more difficult to determine when loads originate from more than one county. Maryland Environmental Service (MES) generally accounts for this problem by dividing multi-county loads according to the relative population of each county.

The [Midshore Regional Recycling Program](#) (MRRP) has had to identify the total amounts of generated, disposed, and/or recycled refuse as defined in the [Maryland Recycling Act](#) (MRA). For 2012, the MRRP reported 46,881 tons of MRA¹ defined recyclables were generated in Queen Anne's County and an additional 40,932 tons of non-MRA recyclables (including 38,677 tons of corn ensilage).

The figures for existing solid waste generation presented in [Table 3-1](#) are based on data supplied by the Maryland Department of the Environment. [Table 3-1](#) depicts existing and projected solid waste generation for Queen Anne's County.

In 2012, residential and commercial solid waste generated in Queen Anne's County totaled 28,080 tons, based on the information provided by the Maryland Department of the Environment. This includes 13,503 tons of residential and 14,577 tons of commercial municipal solid waste disposed at the Midshore Regional Solid Waste Facility (and other regional landfills). Commercial solid waste also includes industrial and institutional wastes.

Due to reductions in state budgets the MD Department of Agriculture's Animal Health Lab near Centreville closed in 2010, therefore there is no official dead animal data.

Table 3-1**Annual Waste Generation of Queen Anne's County****2015-2025**

Waste Category	Annual Generation (Tons)			
	2012 (Actual)	2015	2020	2025
Residential (MSW)	13,503	13,993	14,840	15,738
Commercial (MSW)	14,577	15,106	16,020	17,958
Mixed(MSW)	0	-	-	-
Industrial (solids, liquid, etc.)	0	-	-	-
Institutional (schools, hospitals etc.)	0	-	-	-
Demolition Debris (C&D)	8,988	9,314	9,878	11,073
Land Clearing	2	2	2	2
Controlled Hazardous Substance (CHS)	0	-	-	-
Dead Animals	0	-	-	-
Bulky or Special Waste	0	-	-	-
Vehicle Tires*	0	-	-	-
Wastewater Treatment Plant Sludges	74	77	81	91
Asbestos	11	11	12	14
Soil	57	59	63	70
Special Medical Waste	6	6	7	7
Total MRA & NON MRA Waste	37,218	38,569	40,902	45,852
Total Mid-Shore County MRA & NON MRA Recyclables	163,334	169,263	179,503	201,223

* Vehicles tires (scrap tires) tonnages are included in Total Mid-Shore County MRA & NON MRA Recyclables.

2015 - 2025 estimates based on a total of 12.1% population increase between 2010 and 2020 from Census Data = 1.21% every year.

According to data compiled by the MRRP, Queen Anne's County generated 65 tons of waste tires in 2012, all of which were recycled. This total does not include tires collected at other collection facilities, such as service stations, unless their end-use consumer provided tonnage information back to MRRP. Tires are accepted for recycling at all five Queen Anne's County drop-off centers plus the Midshore Regional Solid Waste Facility. After 1994, tires were not permitted to be disposed in landfills (Title 9-228, Annotated Code of Maryland).

Sludge generation data in wet tons was available from the Maryland Department of the Environment for 2012. This data indicates 2,513 wet tons of sludge generated within Queen Anne's County for 2012 (see [Table 3-2](#) – and detailed report in [Appendix A](#)). Of this sludge, 38 tons were hauled to the Kent Narrows / Stevensville / Grasonville Wastewater Treatment Plant and 1,851 tons were applied to agricultural lands. The Midshore II Regional Solid Waste Facility accepted 624 tons of sludge from Queen Anne's County in 2012. Sludge

generation from small municipal treatment systems such as exist in Queen Anne's County is highly variable and depends largely on factors such as drying weather and cleanout schedules for digesters and lagoons. Therefore, individual treatment plants may not generate sludge every year. However, total Queen Anne's County sludge generation has remained in a consistent range over the past three years.

Table 3-2: 2012 Sludge Generation in Queen Anne's County

<u>Wastewater Treatment Plant</u>	Sludge	
	Wet Tons	Disposal Method
Centreville	200	Hauled to MRL
Chesapeake College	38	Hauled to KNSG
Church Hill	0	* None
Eastern Correct. Camp	0	* None
Millington	73	Hauled to MRL
QA – KNSG	1,851	Applied to Marginal Land
Queenstown	551	Hauled to MRL
<u>Sudlersville</u>	0	* None
Total	2,713	

* Sewage treatment plant lagoon systems that do not generate large quantities of sludge annually.

Septage (primarily septic tank pumpings) was estimated to be 11,270 wet tons in 2012. Although classified as a solid waste, this material is mostly water. Most septage generated in Queen Anne's County is disposed at the Kent Narrows/Stevensville/Grasonville (KNSG) wastewater treatment facility, run by the Queen Anne's County Sanitary District. No land disposal of septage is allowed in Queen Anne's County, and no municipal sewage treatment plants in Queen Anne's County will accept septage. The KNSG wastewater treatment facility received 2,701,000 gallons of septage in 2012. A small portion of septage generated in Queen Anne's County is probably exported to Mansfield & Sons, Inc., a permitted septage land application site in Talbot County. Septage that is processed at the KNSG WWTP is included in [Appendix B](#). There are presently 20 licensed liquid waste haulers in Queen Anne's County, some of which are based in neighboring counties. Therefore, an additional 10 percent is added to account for this estimated exportation.

According to the University of Maryland Extension Office in Centreville, there are 90 chicken houses within Queen Anne's County. Each house produces approximately 125 tons of chicken manure or a total of 11,250 tons annually. All of this material is analyzed in accordance with the specifications set forth in the Maryland Nutrient Management Plan and land applied to farmland within the County. The typical recommended application rate of 2.5 tons per acre covers approximately 4,500 acres of farmland per year. The County has approximately 156,000 tillable farmland acres with the County.

The amount of poultry litter produced is a direct function of the number of chicken houses, which has remained fairly constant over the past five years. Estimated future production of poultry litter is likewise expected to be fairly constant. It was estimated one percent of the annual poultry litter that is produced in the County is exported out. Importation of chicken litter is estimated to be about the same quantity.

Maryland Department of Planning population projections are used for projecting the amount of solid waste. Per capita generation rates are assumed to remain constant during the projection period. Increases in the recycling rate may divert more material from disposal, but should not alter overall solid waste generation rates.

Solid Waste Entering/Leaving Queen Anne’s County

As discussed above, the waste stream in the Midshore region, including Queen Anne’s County, is becoming less local and more regional in character. The Midshore II Regional Solid Waste Facility, the Midshore Regional Recycling Program, a reduced number of rubble landfills, and fewer but larger private waste haulers are all factors in this change.

There are presently significant flows of solid waste into and out of Queen Anne’s County, as shown below for 2012:

Type of Solid Waste	Tons	Destination
ENTERING COUNTY:		
Sewage Sludge	10,403	Land Application
Construction Debris	6,647	R. B. Baker & Sons, Inc.
SUBTOTAL, ENTERING:	17,050	
LEAVING COUNTY:		
Municipal Solid Waste	38,524	Midshore Regional SWF & OS ¹
Construction Debris	81	Midshore II Regional SWF
Sewage Sludge	624	Midshore II Regional SWF
Tires	60	MRRP/Commercial Recycling
Recyclables	17,315	MRRP/Commercial Recycling
Septage	788	Neighboring Counties
Household Hazardous Waste	5	OS treatment & disposal
SUBTOTAL, LEAVING:	56,849	

The single largest category of solid waste entering Queen Anne’s County is sewage sludge from Western Shore sewage treatment plants. In 2012 the MDE reported 10,403 wet tons of sludge were imported into Queen Anne’s County, all of which was applied to agricultural land. Of the 10,403 wet tons, 5,419 wet tons were from other Maryland Counties and 0 wet tons were transported from other states ([See Appendix A](#)).

¹ OS = Out-of-State

The quantity of sewage sludge imported into Queen Anne's County for agricultural application has dropped from 115,382 wet tons in 2000 to 10,403 wet tons in 2012. This reduction in the amount of imported sludge may be due to changes in the contracts available to private haulers that utilize Queen Anne's County and more stringent enforcement at the local level. Currently SynAgra is the only permitted company to apply sludge to agricultural land in Queen Anne's County.

Generators pay a \$1.00 per wet ton fee for Class I sludge generated in Maryland, and \$2.00 per wet ton for out-of-state Class I sludge. Class I sludge is suitable for application to agricultural land. The Queen Anne's County Health Department receives up to 45 percent of these generator fees for its monitoring program. The largest sources of sludge imported into Queen Anne's County in 2012 were from the District of Columbia's Blue Plains Wastewater Treatment Plant (WWTP) and Washington Suburban Sanitary Commission's Piscataway WWTP.

There is also rubble waste from the other Midshore Counties, which is disposed at the R. B. Baker & Sons, Inc. rubble landfill near Queenstown.

Presently all municipal solid waste generated in Queen Anne's County leaves the county for disposal at the Midshore II Regional Solid Waste Facility in Caroline County. This is the largest category of solid waste leaving Queen Anne's County. It is assumed that all recyclables collected in Queen Anne's County leave the County for processing, except for composted and/or mulched yard waste, recycled corn ensilage and poultry manure.

Existing Solid Waste Collection Systems

Municipal Solid Waste Collection Programs

Existing municipal solid waste collection systems operating in Queen Anne's County are described below. The service areas for these collection systems are the respective Town's corporate limits. None of these towns provide curbside collection service using its own equipment and employees (except for bulky item pickup). All towns contract with private companies for their collection service. All towns pay a fee based on the number of households served, plus landfill tipping fees.

1. Town of Barclay - The town contracts with Allied Waste Services, Inc. (now called Republic Services of Delaware) for one day per week (Wednesday) residential curbside trash collection. Approximately 55 households are served. Barclay, by contract, does not require the contractor to use the Midshore II Regional landfill, in Caroline County and all waste collected by the contractor is transported to the Republic Services Facility in Sandtown, Delaware. There is no recycling service and no pick-up service including yard waste and bulky item collection.

2. Town of Centreville – The town contracts with Bates Trucking Trash Removal, Inc. for one day per week (Wednesday) residential curbside trash collection and recycling. Approximately 1,750 households are served. Centreville, by contract, does not require the contractor to use the Midshore II Regional landfill, in Caroline County and waste collected by the contractor is transported to the various facilities on the western shore. Centreville Public Works Department picks up bulky items and yard waste one day per week, by permit. Refuse collected by the Town is delivered to the R.B. Baker & Sons, Inc. rubble landfill (rubble and yard waste), or the Midshore II Regional Solid Waste Facility. The MRRP provides a recycling drop-off station on Banjo Lane. Additional materials are accepted for recycling and disposal at the Centreville Drop-off Center on Harper Road.
3. Town of Church Hill - The Town contracts with Chesapeake Waste Services, Inc. for one day per week (Tuesday) residential curbside trash and collection. Approximately 260 households are served. This waste is transported by the contractor to the Midshore II Regional Solid Waste Facility, which is a contract requirement. The Town through Chesapeake Waste schedules a once a year pickup for yard waste or bulky items, at no additional cost. The Town also has no curbside recycling program. The nearest drop-off recycling station is at the Church Hill Drop-off Centers.
4. Town of Millington - Most of the Town of Millington is located in Kent County. All parts of the town have residential curbside trash collection that is contracted to Chesapeake Waste Services, Inc. Approximately 9 households in the Queen Anne's County portion of the town receive this service. Collection is one day per week, on Thursdays. Refuse collected is transported by the contractor to the Midshore II Regional Solid Waste Facility which is a contract requirement. The Town has no scheduled pickup for yard waste or bulky items. Recycling curbside collection services are provided by the town on a weekly basis (Thursday).
5. Town of Queen Anne - This town is located in both Talbot and Queen Anne's Counties. The town contracts residential curbside trash collection to Allied Waste Services, Inc. (now called Republic Services of Delaware) for one day per week (Thursday) pickup service. Approximately 60 households in town receive this service. Queen Anne, by contract, does not require the contractor to use the Midshore II Regional landfill, in Caroline County and all waste collected by the contractor is transported to the Republic Services Facility in Sandtown, Delaware. There is no pick-up service including yard waste and bulky item collection. Queen Anne provides a curbside recycling program that is contracted to Infinity Recycling.
6. Town of Queenstown - The Town contracts with Allied Waste Services, Inc. (now called Republic Services of Delaware) for one day per week (Friday) residential curbside trash collection. Approximately 300 households are served. Queenstown, by contract, does not require the contractor to use the Midshore II Regional landfill, in Caroline County and all waste collected by the contractor is transported to the Republic Services Facility in Sandtown, Delaware. The Town staff makes a separate pick up of yard waste and bulky items every Monday and hauls it to the Grasonville Drop-off Center or the R.B. Baker rubble landfill. Also, Queenstown provides a curbside recycling pickup

service for residents that is contracted to Allied Waste Services, Inc. (now called Republic Services of Delaware) and picked up on a biweekly basis (Wednesday).

7. Town of Sudlersville – The Town contracts with Charlie’s Trash Services, Inc. for one day per week (Thursday) residential curbside trash and recycling collection. Approximately 207 households are served. Waste collected by the contractor is transported to the Midshore II Regional Solid Waste Facility, although this is not a contract requirement and some exportation may occur. The Town does not provide any separate yard waste or bulky item pickup. Residents with large items or yard waste must transport these to the nearest drop-off center (Glanding or Church Hill). The MRRP provides a recycling drop-off station at Southern States.
8. Town of Templeville - This town is located in both Queen Anne’s County and Caroline County. The Town contracts with Allied Waste Services, Inc. (now called Republic Services of Delaware) for one day per week (Wednesday) residential curbside trash collection. A total of 37 households are served in both parts of town. Templeville, by contract, does not require the contractor to use the Midshore II Regional landfill, in Caroline County and all waste collected by the contractor is transported to the Republic Services Facility in Sandtown, Delaware. The Town neither provides any separate yard waste or bulk item pickup service, nor do they have a curbside recycling program. The MRRP provides a recycling drop-off station on Route 454.

Private Solid Waste Haulers

Eleven private companies are known to operate solid waste collection systems within Queen Anne’s County:

1. Republic Services/BFI/Allied – This company operates from Felton, Delaware and serves the Midshore region. Republic holds four of the eight current contracts for municipal solid waste curbside collection in Queen Anne’s County, and presently serves the following towns: Barclay, Queen Anne, Queenstown and Templeville. The company provides complete dumpster and roll-off container service for commercial customers in all of Queen Anne’s County. Republic also provides bulky item collection, front-end dumpster services, and large container cardboard recycling pick-up. Municipal solid waste and rubble collected is transported to either the Farmington, DE facility or the Midshore Regional Solid Waste Facility in Caroline County.
2. Waste Management, Inc. – Waste Management, Inc., is based in Cambridge, MD and serves both residential and commercial customers in the Midshore region. Although currently holding no collection contracts with any of the municipalities, Waste Management does provide curbside pickup for households in unincorporated Queen Anne’s County. Other services offered by Waste Management include bulky item pickup (for an extra fee), roll-off container and front-end dumpster services, and recycling pickup. Some municipal solid waste is transported to the Midshore Regional Solid Waste Facility and some is exported to the Waste Management Facility in Baltimore. Rubble is disposed of at the R. B. Baker Rubble Landfill and the Waste Management Facility in Baltimore.

3. Bates Trucking Trash Removal – Bates Trucking is based in Bladensburg, MD and serves residential customers in the Midshore region. The company currently has the contract for the Town of Centreville for curbside trash and recycling services. Bates Trucking currently provides these services to approximately 3500 residents throughout the County. Municipal solid waste and recycling are transported to the Waste Management Facilities in Baltimore.
4. Charlie's Trash Removal – Charlie's Trash is located in Millington, MD and serves both residential and commercial customers in the Midshore region. Charlie's Trash currently holds the contract for the Town of Sudlersville and provides trash and recycling to the town. The company also provides residential bulky item pick up and commercial cardboard recycling. Municipal solid waste is transported to the Midshore Regional Solid Waste Facility in Caroline County. Cardboard recycling is transported to Creafil Fibre Solutions in Worton, MD.
5. Chesapeake Waste – Chesapeake Waste is located in Salisbury, MD and serves residential and commercial customers in the Midshore region. This company currently holds the contracts for the Towns of Church Hill and Millington. Chesapeake Waste also provides a bulky item collection service. Municipal solid waste is transported to the Midshore Regional Solid Waste Facility in Caroline County.
6. We're Talking Trash – This company is located in Fairlee, MD and serves residential and commercial customers in Northern Queen Anne's County as far south as Centreville. In addition to curbside service, We're Talking Trash also provides a bulky item service and rear load container service. Municipal solid waste is transported to the Midshore Regional Solid Waste Facility in Caroline County and rubble is transferred to the R.B. Baker Landfill.
7. Bay Area Disposal – This company is located in Eden, MD and provides residential and commercial front-end and roll-off container services in the Midshore region. Bay Area Disposal also provides cardboard recycling containers for commercial customers. Municipal Solid Waste is delivered to the Midshore Regional Solid Waste Facility, rubble is transferred to the R.B. Baker Rubble Landfill and cardboard from Queen Anne's County is delivered to the Queen Anne's County Recycling Center.
8. Chris Lee Roll-Off Service, Inc. – This company is located in Easton, MD and provides roll-off services to all areas of Queen Anne's County. Both residential and commercial customers are served. Municipal solid waste is delivered to the Midshore Regional Solid Waste Facility and rubble is transferred to the R.B. Baker Rubble Landfill. Recyclable construction and demolition debris is taken to Dependable and Schultz Salvage.
9. Pat's Pride Hauling – Pat's Pride is based in Rock Hall and provides residential and commercial roll-off container collection services to all of Queen Anne's County. Municipal solid waste is delivered to the Midshore Regional Solid Waste Facility and rubble is transferred to the R.B. Baker Rubble Landfill.

10. Patuxant Rolloff - This company is located in Crofton, MD and provides residential and commercial front-end and roll-off container service to the Midshore region. Patuxant also provides cardboard recycling for commercial customers. Municipal solid waste is transported to the Midshore Regional Solid Waste Facility, rubble is delivered to the R.B. Baker Rubble Landfill and cardboard is delivered to Waste Management in Baltimore.
11. Rob Breeding – Rob Breeding is located in Denton, MD and provides residential and commercial roll-off container collection services to the Midshore region. Municipal solid waste is delivered to the Midshore Regional Solid Waste Facility and rubble is transferred to the R.B. Baker Rubble Landfill. Recyclable construction and demolition debris is taken to Dependable, Brambles and the R.B. Baker Rubble Landfill.
12. Sonny Eaton Rolloff, LLC - This company is located in Queen Anne, MD and provides residential and commercial roll-off container collection services to the Midshore region. Municipal solid waste is delivered to the Midshore Regional Solid Waste Facility and rubble is transferred to the R.B. Baker Rubble Landfill. Recyclable construction and demolition debris is taken to Dependable.
13. Bridges Waste Management, Inc. – A St. Michael’s based company, Bridges Waste Management serves all of Queen Anne’s County and collects rubble and construction / demolition wastes only. Roll-off container service is provided to both residential and commercial customers. Municipal solid waste is delivered to the Midshore Regional Solid Waste Facility and rubble is transferred to the R. B. Baker Rubble Landfill in Queenstown.

Existing Rural Solid Waste Collection Points

The locations of all existing solid waste acceptance facilities in Queen Anne’s County are shown on a map included as a fold-out in the back of this plan.

Queen Anne’s County Rural Solid Waste Collection Points

The Queen Anne’s County Department of Public Works operates a system of five residential drop-off and recycling centers. These facilities are located throughout the County. They are intended to provide a location for residents and property owners in Queen Anne’s County to dispose of their solid waste, and to recycle materials. Each Drop-off Center is located at a former landfill site. Although the Price Chapel Landfill is closed, there is not a Drop-off Center at that location at this time.

Pursuant to its Consent Order from the Maryland Department of the Environment, Queen Anne’s County has completed the placement of impervious caps on three former landfills as a part of the closure process: Centreville Landfill, Glanding Road (Millington) Landfill and Price Chapel Landfill. These closure requirements were a result of State of Maryland regulations. All three landfills ceased receiving household

waste prior to October 9, 1991. Therefore, they are not subject to Federal RCRA Subtitle D closure and monitoring requirements.

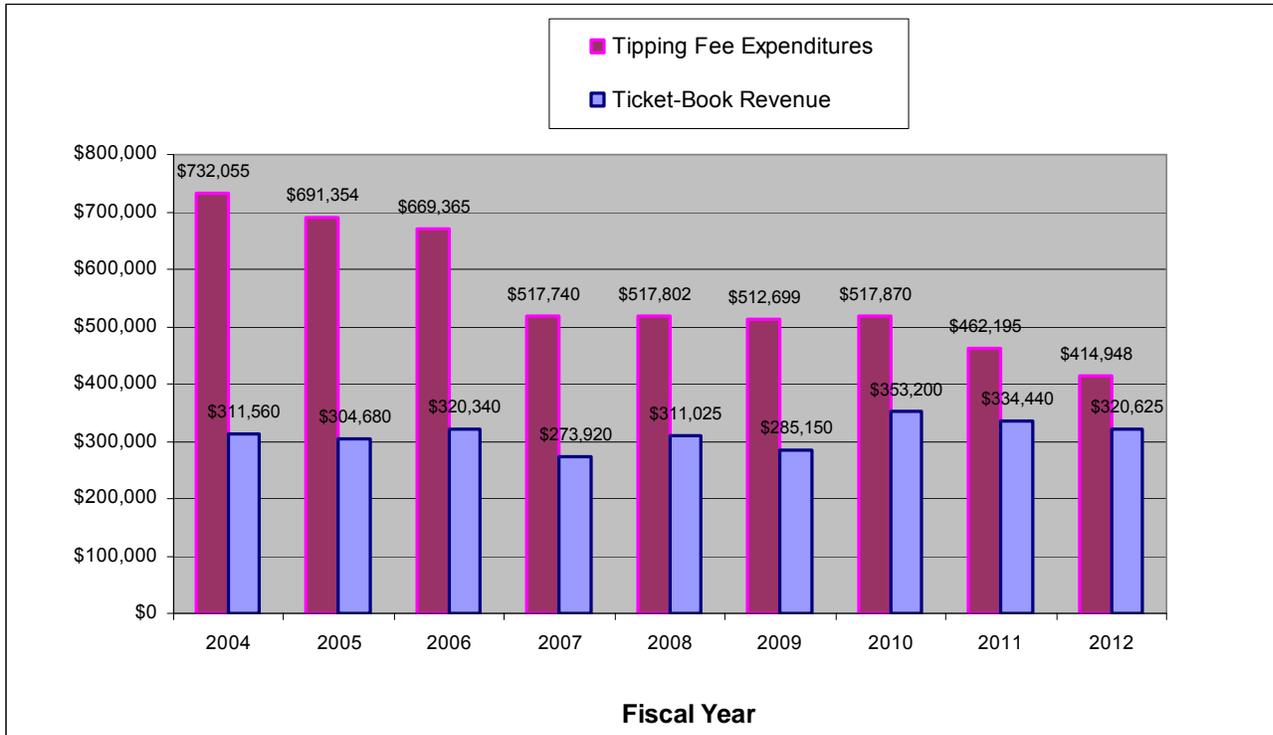
Queen Anne's County has used several fee systems to help offset the cost of the Drop-off Center system. The annual permit and coupon system was discontinued at the end of FY1996 and was replaced by a new ticket book system. This system was intended to accommodate the needs of citizens without a significant increase in the annual permit fee, and to offer a "pay per trip" system. This provides an incentive for users to reduce their number of trips to the drop-off center. A 15-ticket book is priced at \$45. FY2012 revenue for the system was \$320,625. Each ticket is good for one admittance of a vehicle into a Drop-off Center. Additional tickets are required for trailers and for the disposal of certain items: 1 ticket per car or light truck tire, and 10 tickets per refrigerator or appliance containing CFCs. A ticket is not required to drop off recyclables at the igloos. Currently these ticket book fees collected at the Drop-off Centers for solid waste that is landfilled do not cover annual tipping fee expenditures. The ticket book system was originally designed to be a self-sufficient "pay-as-you-throw" program. Ticket book sales were intended to cover all tipping fees associated with disposal of residential municipal solid waste. [Chart 3-3](#) shows ticket book sales versus tipping fees since 2004 on a fiscal year basis. Revenues collected from ticket book sales have never been enough to cover expended transfer fees. The table shows a significant loss over the past five years, ranging from a loss of \$420,495 in 2004 to a loss of \$94,323 in 2012. One of the primary problems with this type of system is in the area of enforcement. It is difficult to keep non-county residents from purchasing the ticket books and disposing of their refuse out of their home County. However the County has greatly reduced the acceptance of construction and demolition debris. In addition, there are numerous small businesses and contractors that illegally use the Drop-off Centers for dumping of commercial waste.

Queen Anne's County currently has a formal policy that prohibits employees or citizens from scavenging solid waste from the Drop-off Centers. A ReUse Program started in March 2012 at the Batts Neck Drop-off Center to capture good, usable items from the waste stream. These items are collected in an enclosed trailer and transported and sold at a local auction. This program has decreased items taken to the landfill, decreased tipping fees and generated revenue for the County. The ReUse Program is now available at all five County Drop-off Centers.

County Drop-off Centers are open 8:00 a.m. to 4:00 p.m. on the following schedule, with the exception of Christmas, New Years, Thanksgiving, Labor Day, and July 4th. Yard waste and tires are accepted during all open hours.

- Batts Neck – Open Wednesday, Friday and Saturday
- Grasonville – Open Tuesday, Thursday and Saturday
- Centreville – Open Monday, Wednesday and Saturday
- Church Hill – Open Thursday and Saturday
- Glanding – Open Friday and Saturday

Chart 3-3: Ticket Book Sales versus Tipping Fees – FY2004 to FY2012



The following waste materials are accepted at the drop-off centers:

1. Household trash in bags or garbage cans.
2. Construction and Demolition Debris (55 gallons maximum per week) – brick, wood shingles, concrete, lumber, drywall, etc.
3. Washers, dryers, and other appliances – refrigerator lines must not be cut.
4. Passenger car and light truck tires 17” and less in diameter. Rims must be removed.
5. Furniture and other bulky items.
6. Glass bottles and jars.
7. Plastic (No. 1 and No. 2) bottles and containers.
8. Aluminum & tin cans.
9. Mixed paper.
10. Grocery bags.
11. Corrugated cardboard.
12. Used motor oil, antifreeze and gasoline (Gasoline at Centreville location only).
13. Yard waste – brush less than 4” in diameter, 6’ in length.
14. Used clothing.

15. Scrap metals.
16. Pallets.
17. Plastic boat film – Grasonville only.
18. Items for ReUse program.

The following waste materials are not accepted at the drop-off centers:

1. Commercial or contractor waste of any kind.
2. Farm waste.
3. Animal carcasses.
4. Hazardous substances.
5. Firearms.
6. Gas cans or tanks, propane containers.
7. Stumps and wood over 6’ long and 4” in diameter.
8. Burned material.

During calendar year 2012, the five drop-off centers collected a total of 11,366 tons of municipal solid waste (MSW) and 4,682 tons of rubble. Since 1999, the amount of MSW collected at the drop-off centers has increased by 2,153 tons or 23 percent. During this same period, rubble collected at the drop-off centers has increased by 639 tons or 16 percent. Recent MSW and rubble collections at the drop-off centers are shown on Tables [3-4](#) and [3-5](#) below.

Table 3-4: MSW Collected by Individual County Drop-off Centers (in Tons)

Drop-off Center	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Batts Neck	2453	3445	3400	3051	2697	2718	2467	2209	1974	1588
Grasonville	2777	2787	2588	2443	2150	2129	2086	1953	1638	1419
Centreville	1483	1559	1680	1777	1541	1396	1391	1384	1179	1014
Church Hill	1233	1241	1238	1336	1212	1125	1163	1215	880	702
Glanding	2132	2152	2185	1865	1684	1602	1452	1220	1044	772
Totals	10078	11184	11091	10472	9284	8970	8559	7981	6715	5495

Table 3-5: Rubble Collected by Individual County Drop-off Centers (in Tons)

Drop-off Center	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Batts Neck	1539	1611	1589	789	205	202	252	226	257	273
Grasonville	1219	1151	1037	635	224	220	234	239	259	245

Centreville	587	521	599	403	113	143	154	157	162	138
Church Hill	541	547	476	349	128	124	154	160	132	113
Glanding	796	806	715	441	67	64	109	60	63	90
Totals	4682	4636	4416	2617	737	753	903	842	873	859

During calendar year 2013, the five drop-off centers served an average of 1,910 vehicles per week based on ticket collection tallies. Vehicle traffic was heaviest at the Batts Neck and Grasonville centers, and lowest at the Glanding, Centreville, and Church Hill centers. All of the drop-off centers are either operating at or near maximum capacity based on current site configurations and equipment. Monthly ticket collection data for 2013 is included in [Appendix C](#).

The public solid waste acceptance facilities in Queen Anne's County are described below:

1. Batts Neck Drop-off Center – Located on Kent Island on Batts Neck Road. The site is reached by taking Maryland Route 8 south for 3.5 miles from U.S. 50 at Stevensville.

Tax Description:	Tax Map 63, Grid 14, Parcel 88
Ownership:	Queen Anne's County Commissioners
Size:	29 acres
Current Zoning:	CS – Countryside
MD Grid Coordinates:	401100 N, 986300 E
Service Life Remaining:	Undetermined
Permit Status:	Permitted

The Batts Neck Drop-off Center was opened in 1979 at the front of the old Batts Neck Landfill site. Closure of the old landfill has been completed. The site now serves as a residential drop-off and recycling center. Current estimated traffic is about 640 vehicles per week, which makes Batts Neck the busiest of the five drop-off center in Queen Anne's County. In 2013, this center received 28 percent of the MSW and 33 percent of the rubble collected at all Queen Anne's County drop-off centers. There is no anticipated end of service life since all materials are taken off site.

This site is equipped with the following disposal facilities:

- Five self-contained roll-off compactors
- Four open top roll-off containers for furniture
- Two open top roll-off containers for rubble
- Three self-contained roll-off compactors used for overflow of trash or cardboard
- Three open top roll-off containers used for overflow of furniture, rubble or metal

The roll-off containers are for household refuse. When full, these containers are transported by Queen Anne’s County Solid Waste Division trucks to the Midshore Solid Waste Facility for disposal. Brush and yard wastes are stockpiled and periodically chipped by an outside contractor.

Recycling facilities at Batts Neck include:

- One self-contained roll-off compactor for cardboard
- Two open top roll-off containers for metal/white goods
- One open top roll-off container for used car and light truck tires up to 17”
- One 8 cubic yard can for mixed paper
- One 8 cubic yard can for green glass
- One 8 cubic yard can for clear glass
- Two igloos for brown glass
- One 8 cubic yard can for aluminum/tin cans
- Two 8 cubic yard cans for plastic
- Two containers for plastic bags
- Two waste oil tanks
- Two antifreeze barrels
- One trailer for clothing
- White goods storage area
- Specialized metal storage area
- Lead acid battery storage area
- Pallet storage area
- One container for computer and computer components
- Three trailers for ReUse items

2. Grasonville Drop-off Center – Located at the end of Gravel Run Road. The site is reached by traveling south from Maryland Route 18 (Main Street) in Grasonville.

Tax Description:	Tax Map 58, Grid 23, Parcel 494 & 489
Ownership:	Queen Anne’s County Commissioners
Size:	35 acres
Current Zoning:	SR – Suburban Residential
MD Grid Coordinates:	409200 N, 1037700 E
Service Life Remaining:	Undetermined
Permit Status:	Permitted

This drop-off center is also a converted landfill site. Closure of this landfill has been completed. Grasonville was the first drop-off center built in Queen Anne’s County when it was opened in 1977. Current estimated traffic volume is about 530 vehicles per week. Grasonville is the second busiest of the five drop-off centers. In 2013 this center received 26 percent of the MSW and 28 percent of the

rubble collected at all Queen Anne's County drop-off centers. There is no anticipated end of service life since all materials are taken off site.

This site is equipped with the following waste disposal facilities:

- Three self-contained roll-off compactors
- Three open top roll-off containers for furniture
- Two open top roll-off containers for rubble
- Three self-contained roll-off compactors used for overflow of trash or cardboard
- Three open top roll-off containers used for overflow of furniture, rubble or metal

The roll-off compactors are for household refuse. When full, these containers are transported by Queen Anne's County Solid Waste Division trucks to the Midshore Regional Solid Waste Facility for disposal. Brush and yard waste are stockpiled and periodically chipped by an outside contractor.

Recycling facilities at Grasonville include:

- One self-contained roll-off compactor for cardboard
- Two open top roll-off containers for metal/white goods
- One open top roll-off container for used car and light truck tires up to 17"
- One 8 cubic yard can for mixed paper
- One 8 cubic yard can for plastics
- One 8 cubic yard can for aluminum/tin cans
- Two igloos for clear glass
- One igloo for brown glass
- One igloo for green glass
- Two containers for plastic bags
- One waste oil tank
- Two antifreeze barrels
- Shed for clothing
- White goods storage area
- Specialized metal storage area
- Lead acid battery storage area
- Pallet storage area
- One container for computer and computer components
- Two trailers for ReUse items
- One container for plastic boat film

This site also serves as a stockpile staging area as part of the Department of Natural Resources' Oyster Re-seeding Program. The program provides a location for local oyster packinghouses to

temporarily stockpile oyster shells for re-planting oyster spat in local oyster beds. This operation has been in place for over 30 years and is expected to continue.

3. Centreville Drop-off Center – Located north of Centreville on the northwest side of Harper Road. The site is reached from Maryland Route 213, to Purple Martin Road, to Burrsville Road, to Harper Road.

Tax Description:	Tax Map 28, Grid 24, Parcel 42, 138 & 140
Ownership:	Queen Anne’s County Commissioners
Size:	44.23 acres
Current Zoning:	AG - Agricultural
MD Grid Coordinates:	457000 N, 1068500 E
Service Life Remaining:	Undetermined
Permit Status:	Permitted

Part of this site was formerly the largest landfill in Queen Anne’s County. It ceased receiving household waste in March 1991, but continued to accept selected construction and demolition materials until July 1, 1993. Pursuant to the Consent Order with the Maryland Department of the Environment, this landfill was closed with an impervious cap.

Current estimated traffic volume at the drop-off center is about 332 vehicles per week. In 2013, this center received 17 percent of the MSW and 15 percent of the rubble collected at all Queen Anne’s County drop-off centers. There is no anticipated end of service life since all materials are taken off site.

This site is equipped with the following waste disposal facilities:

- Two self-contained roll-off compactors
- Three open top roll-off containers for furniture
- One open top roll-off containers for rubble
- Five open top roll-off containers used for overflow of furniture, rubble or metal

The roll-off compactors are for household refuse. When full, these containers are transported by Queen Anne’s County Solid Waste Division trucks to the Midshore Regional Solid Waste Facility for disposal. Brush and yard waste are stockpiled and periodically chipped by an outside contractor. The Centreville Drop-off Center serves as a central consolidation point for recycled materials collected in Queen Anne’s County.

Recycling facilities at this site include:

- Two open top roll-off containers for cardboard

- One open top roll-off container for used car and light truck tires up to 17"
- One open top roll-off container for metal/white goods
- One covered roll-off container for mixed paper
- One open top roll-off container for aluminum/tin cans
- Two spare open top roll-off containers for glass; used as needed
- One 8 cubic yard can for aluminum/tin cans
- One 8 cubic yard can for plastic
- One 8 cubic yard can for mixed paper
- One igloo for brown glass
- One igloo for clear glass
- One igloo for green glass
- One container for plastic bags
- One waste oil tank
- One antifreeze tank
- One gasoline tank
- Storage area for clothing
- White goods storage area
- Specialized metal storage area
- Lead acid battery storage area
- Pallet storage area
- One container for computer and computer components
- One trailer for ReUse items

On June 5, 2008 the County Commissioners approved the construction of a Materials Consolidation Facility at this location. Partial funding for this facility was provided by the County Recycling Surcharge Fund from a recycling surcharge included in the tipping fee at R.B. Bakers Rubble Landfill. The grand opening of the Queen Anne's County Recycling Center took place on December 4, 2009. The center is used to bale cardboard, sorted office paper and plastic boat film. This facility is also the consolidation location for plastic, cans and glass from the county office recycling program. In April 2013, the County signed a five year recycling service agreement with Georgetown Paper Stock of Baltimore and Rockville. This agreement guarantees pricing over the market index for baled cardboard and sorted office paper. As part of this agreement, Georgetown furnished a horizontal baler and conveyor system for a monthly rental of \$500 and provides all normal repair and maintenance of the equipment.

Adjoining this existing facility at the end of Harper Road is a 124-acre parcel that the County Commissioners of Queen Anne's County purchased for use as the future site of the Midshore Regional Solid Waste Facility.

4. Church Hill Drop-off Center – Located southeast of Church Hill at the intersection of Maryland Routes 19 and 405.

Tax Description	Tax Map 23, Grid 7, Parcel 134 & 135
Ownership:	Queen Anne's County Commissioners
Size:	21 acres
Current Zoning:	AG – Agricultural
MD Grid Coordinates:	473600 N, 1088800 E
Service Life Remaining:	Undetermined
Permit Status:	Permitted

Another former landfill site, this facility is now operated as a residential drop-off center. Landfill closure has been completed. Current estimated traffic volume is about 216 vehicles per week. In 2013, this center received 14 percent of the MSW and 14 percent of the rubble collected at all Queen Anne's County drop-off centers. There is no anticipated end of service life since all materials are taken off site.

This site is equipped with the following waste disposal facilities:

- Two self-contained roll-off compactors
- Two open top roll-off containers for furniture
- One open top roll-off container for rubble
- Three open top roll-off containers used for overflow of furniture, rubble or metal

The roll-off compactors are for household refuse. When full, these containers are transported by Queen Anne's County Solid Waste Division trucks to the Midshore Landfill for disposal. Brush and yard waste are stockpiled and periodically chipped by an outside contractor.

Recycling facilities at Church Hill include:

- Two open top roll-off containers for cardboard
- One open top roll-off container for used car and light truck tires up to 17"
- One open top roll-off containers for metal/white goods
- One 8 cubic yard can for mixed paper
- One igloo for clear glass
- One igloo for brown glass
- One igloo for green glass
- One 8 cubic yard can for aluminum/tin cans
- Two 8 cubic yard cans for plastic
- One container for plastic bags

One waste oil tank
 One antifreeze barrel
 Shed for clothing
 White goods storage area
 Specialized metal storage area
 Lead acid battery storage area
 Pallet storage area
 ReUse item storage area

5. Glanding Road Drop-off Center – Located southwest of Millington on Glanding Road.

Tax Description:	Tax Map 7, Grid 1, Parcel 46
Ownership:	Queen Anne's County Commissioners
Size:	35 acres
Current Zoning:	AG – Agricultural
MD Grid Coordinates:	514300 N, 1125200 E
Service Life Remaining:	Undetermined
Permit Status:	Permitted

Part of this site was the former Glanding Road (Millington) Landfill. It ceased receiving any waste in March 1991, and has received final cover. Pursuant to the Consent Order with the Maryland Department of the Environment, this landfill was closed with an impervious cap.

Current estimated traffic volume for the Drop-off Center is about 192 vehicles per week. This is the lowest volume drop-off center operated by Queen Anne's County. In 2013, this center received 15 percent of the MSW and 10 percent of the rubble collected at all Queen Anne's drop-off centers. There is no anticipated end of service life since all materials are taken off site.

This site is equipped with the following waste disposal facilities:

- Two self-contained roll-off compactors
- Three open top roll-off containers for furniture
- One open top roll-off container for rubble
- Three open top roll-off containers used for overflow of furniture, rubble or metal

The roll-off compactors are for household refuse. When full, these containers are transported by Queen Anne's County Solid Waste Division trucks to the Midshore Regional Solid Waste Facility for disposal. Brush and yard waste are stockpiled and periodically chipped by an outside contractor.

Recycling facilities at Glanding include:

Two open top roll-off containers for corrugated cardboard
 One open top roll-off container for used car and light truck tires up to 17"
 One open top roll-off container for metal/white goods
 One 8 cubic yard can for plastic
 One 8 cubic yard can for mixed paper
 One 8 cubic yard can for aluminum/tin cans
 One igloo for clear glass
 One igloo for brown glass
 One igloo for green glass
 One container for plastic bags
 One waste oil tank
 Two antifreeze barrels
 Shed for clothing
 White goods storage area
 Specialized metal storage area
 Lead acid battery storage area
 Pallet storage area
 ReUse item storage area

6. Price Chapel – Located on Duhamel Corner Road, approximately 5 miles southeast of Sudlersville.

Tax Description:	Map 19, Parcels 11, 17 & 73
Ownership:	Queen Anne's County Commissioners
Size:	79.5 acres
Current Zoning:	AG – Agricultural
MD Grid Coordinates:	487000 N, 1140400 E
Service Life Remaining:	Not applicable
Permit Status:	Expired, site is inactive

Formerly known as "Landfill #1," this site was permitted by the Department of Health and Mental Hygiene and opened as a landfill in 1973. During most of its active period, this landfill was only open one day per week. At the time the 1985 Supplement was prepared, this facility was accepting only 2,900 tons per year, or about 13 percent of the total solid waste accepted at Queen Anne's County landfills. The site ceased receiving any waste material in October 1990, and has received final cover. Pursuant to the Consent Order with the Maryland Department of the Environment, the Price Chapel Landfill was closed with an impervious cap. The site is currently being utilized by the Sudlersville Skeet Club as a shooting range.

There are no current plans for this site to be used again as a solid waste acceptance facility. However, the property is available if required for future needs.

7. Centreville Future Regional Solid Waste Facility – Located at the end of Harper Road, adjacent to the Centreville Drop-off Center, and north of the Town of Centreville.

Tax Description:	Tax Map 28, Grid 24, Parcel 40
Ownership:	Queen Anne’s County Commissioners
Size:	124 acres
Current Zoning:	AG – Agricultural
MD Grid Coordinates:	458000 N, 1070000 E
Service Life Remaining:	Not applicable
Permit Status:	None, future permit application is required.

The County Commissioners have designated this site as Queen Anne’s County’s future Midshore Regional Solid Waste Facility (MRSWF) site, pursuant to their obligation under the MRSWF agreement. The site will not be used for this purpose until after closure of the original MRSWF in Talbot County, and closure of the current MRSWF location in Caroline County. This should occur in about 2030.

Regional Solid Waste Acceptance Facilities

These solid waste acceptance facilities are located outside of Queen Anne’s County but have been identified as accepting solid waste generated in the County.

1. **Midshore Regional Solid Waste Facility** – This facility is not physically located in Queen Anne’s County at this time. However, it is a critical element in the solid waste management system for Queen Anne’s County. The original Midshore regional agreement was between three counties (Caroline, Queen Anne’s and Talbot) and the Maryland Environmental Service (MES). Kent County joined the agreement in May 1992.

The Midshore project has its origins in the early 1980s when Caroline, Queen Anne’s and Talbot Counties asked MES to investigate a waste-to-energy facility. Rising energy prices and new State and Federal landfill regulations were motivating factors. MES conducted a feasibility and economic study which determined that a solid waste incinerator generating electricity was not economically feasible. However, each county still faced the impending closure of its existing landfills, and the need to design and construct a modern lined, leachate controlled landfill.

Further investigation by MES determined that a regional approach to solid waste management would allow economies of scale that were impossible for individual rural counties to achieve on their own. This produced the agreement to develop the Midshore Regional Solid Waste Facility (MRSWF), which is owned and operated by MES. Land adjacent to the Easton Landfill in Talbot County was selected as the first site, with an initial planned life of 20 years. Under the agreement, each county is obligated to designate its site for the MRSWF. Caroline County is the current host site for the MRSWF. Caroline County's site is also designed for a 20-year life. When it is closed, Queen Anne's County will be the next host. This will occur in about 2030.

If tipping fees are inadequate to support the facility operation, MES can require the counties to make supplemental payments, which has not been required to date. The four counties have a right to take over and pay off the MES bonds, and assume operation of the facility themselves.

The MRSWF opened in March 1991. It is located on a 76-acre site at 7341 Barkers Landing Road, east of Easton in Talbot County. This facility stopped accepting refuse on December 31, 2010. The current MRSWF is located on a 220-acre site at 12236 River Road near Ridgely in Caroline County. MES regularly reports to and meets with County officials regarding MRSWF operations.

The original tipping fee at the MRL was \$25.00 per ton, plus a 10 percent recycling surcharge of \$2.50. The current tipping fee at the Midshore Regional Solid Waste Facility (as of 7/1/13) is \$60.00 per ton that includes a \$5.00 per ton recycling surcharge. The landfill closure fund received \$3.25 per ton for FY13. The tipping fee for yard waste is \$30.00 per ton for clean and segregated loads. For commingled loads, the tipping fee is the standard \$60.00 per ton. There are also tire surcharge fees in addition to the base tipping fee which are \$3.00 per clean passenger tire, no rim (\$6.00 non-clean or with rim), \$4.25 per clean light truck tire, no rim (\$8.50 non-clean or with rim), \$13.00 per clean heavy truck tire, no rim (\$26.00 non-clean or with rim) and \$400 per ton for off-road/equipment tires. The current tipping fee schedule is included in [Appendix H](#) for this facility.

MES reports solid waste data for the MRL on a fiscal year basis. Data is shown in [Table 3-6](#) for fiscal year 2012. Detailed MDE reports for CY2012 prepared by MES are included in [Appendix D](#), which provide monthly data also including sludge, clean earth, construction debris, land clearing debris, tires and recyclables.

Table 3-6: Solid Waste Data for Midshore Regional Solid Waste Facility Generated From the Midshore Region– FY2012

Year	MSWC	MSWR	MSWM	MSWO	Total MSW
2012	29,854	31,806	32,803	15,470	109,933

MSWC – Municipal solid waste, commercial, in tons

MSWR – Municipal solid waste, residential, in tons

MSWM – Municipal solid waste, mixed, in tons

MSWO – Other waste, in tons

For 2012, MES records show that 27,205 tons of municipal solid waste (both residential and commercial) was received at the MRL from Queen Anne’s County. This is about 28.8 percent of the total municipal solid waste received at the MRL. As discussed above under Existing and Projected Solid Waste Generation, the regionalization of solid waste management in the Midshore Region has made such data somewhat less reliable. This is because regional solid waste acceptance facilities must rely on the vehicle driver to accurately identify the county of origin of each waste load.

In 2012, the MRL accepted 15 tons of tires. There is a special surcharge for tires in addition to the regular tipping fee, as shown on the tipping fee schedule ([Appendix H](#)). The MRL permit allows storage of up to 1,500 tires on site. Tires are hauled offsite by a contractor regularly for recycling or to waste to energy facilities depending on the type of tires and market conditions.

2. **Midshore Recycling Consolidation Facility** – The original facility opened in October 1993 at the Midshore Regional Solid Waste Facility site at 7341 Barkers Landing Road in Talbot County. This facility is still used as a consolidation point. The Midshore Regional Solid Waste Facility site at 12236 River Road in Caroline County also has a recycling consolidation area. The Nicholson Drop-off Center in Kent County is used as a third consolidation point. These three locations are used to consolidate recyclable materials from the Midshore Region until they are shipped to processors or end-users. The Midshore Regional Recycling Program (MRRP), using funds from the surcharge on the Midshore Regional Solid Waste Facility tipping fees, operates the consolidation facility in Talbot and Caroline Counties. Cardboard is transported to the Queen Anne’s County Recycling Center at 401 Harper Road in Centreville.

The facilities use a system of retaining walls and consolidation bays to accept recyclable materials. The materials accepted include glass, newspaper, corrugated cardboard, metal food and beverage containers, and plastic bottles. [Appendix I](#) presents total tonnages for both MRA and Non-MRA wastes and recyclables that are received at the MRSWF.

Private Solid Waste Acceptance Facilities

Privately owned and operated solid waste acceptance facilities in Queen Anne’s County are:

1. **R.B. Baker & Sons, Inc. Rubble Landfill** – This is currently the only permitted private solid waste acceptance and disposal facility in Queen Anne’s County. It is owned and operated by R.B. Baker and Sons, Inc. and is located northeast of Queenstown on the southeast side of Maryland Route 18.

Tax Description:	Tax Map 43, Parcel 4
Current Zoning:	SI/AG – Suburban Industrial/Agriculture
Size:	264 acres
MD Grid Coordinates:	427000 N, 1045500 E
Service Life Remaining:	Full capacity estimated in 2020
Permit Status:	Permitted on September 4, 1992, (April 2013 Renewal)

This site was incorporated in the 1991 Supplement to the Queen Anne’s County Master Solid Waste Plan. The original facility opened in October 1992 and operated an unlined seven-acre cell (cell #1). Cell #1 reached capacity and was closed in July 2000. The owners reopened the facility in late November 2000 with a new seven-acre lined cell (cell #2), which is currently in operation. In addition, a vertical expansion (20 ft) of Cell #2 was approved in 2008. Monthly data is available on the tons of rubble waste (construction and demolition, land clearing debris, general rubble, etc.) received. The truck driver at the scale reports the origin of waste, and this information is subject to the same accuracy problems that also occurs at all other solid waste acceptance facilities in the Midshore region. The figures below for Queen Anne’s County, other local (Midshore Region) and other generators (mostly out of state) were derived from the annual report submitted to MDE by R.B. Baker & Sons, Inc. This facility has received the following annual waste quantities including construction and demolition and land clearing debris (in tons) since 2008:

Table 3-7: R.B. Baker & Sons, Inc. Rubble Landfill Receipts – 2008 to 2012

Year	Q.A.C.	Other Local	Other Generators	Annual Total
2008	14,277	9,065	182	23,524
2009	9,645	6,311	118	16,074
2010	11,187	7,306	0	18,493
2011	8,711	7,067	0	15,778
2012	9,506	6,647	0	16,153

Over the past 5 years the amount of rubble waste accepted has decreased from 23,524 tons to 16,153 tons, a reduction of 31 percent. It is estimated by the owner that 20 percent (3,230 tons) of the 16,153 tons collected in 2012 were recycled and diverted out of the waste stream. During 2012 about 83 percent of the rubble waste accepted at this facility was local waste from the Midshore counties of Caroline, Kent, Queen Anne’s, and Talbot. About 17 percent of the waste accepted was

from other generators within the state, largely from Anne Arundel and Dorchester counties. There was no out of state waste. The owners have indicated their intention is to continue to limit the amount of out-of-state waste accepted contingent upon operational and economic matters.

In addition to the limitations imposed by the MDE permit, the Queen Anne's County Conditional Use Permit establishes other requirements and restrictions. These include limitations on operating hours 7:00 a.m. to 5:30 p.m. Monday through Saturday with no activity on Sundays or legal holidays, however current hours of operation are 7:00 a.m. to 3:30 p.m. Monday through Friday and 7:00 a.m. to 11:00 a.m. on Saturday. As well as a landscaping plan approved by the Queen Anne's County Department of Planning and Zoning which effectively screens the existing and proposed landfill from Maryland Route 18.

The Queen Anne's County Conditional Use Permit authorizes R.B. Baker & Sons, Inc. to accept any rubble waste allowable under State or Federal law, except for the following: hazardous waste, infectious waste, radioactive materials, automobiles, animal carcasses, septage or sewage, and asbestos related materials. State allowable wastes are authorized by COMAR 26.04.07 13B and include: land clearing debris, demolition debris, construction debris, asbestos waste, and household appliances and white goods. COMAR also includes specific conditions and limitations relating to many of these waste categories.

Cell #2 has enough capacity for an additional 6 years (2020). In anticipation of the closing of Cell #2, the owners have initiated application with the County to expand the facility to include another 40 acres on the west side Route 18, directly across from the existing rubble landfill. This expansion will provide the County with rubble disposal capacity for a time period well beyond the 10-year planning period.

The current tipping fee at the R.B. Baker rubble landfill is \$62.70 and \$57.20 per ton, for drive-ins and roll-off services, respectively, which includes a \$5.70 County recycling surcharge. Queen Anne's County receives a 25 percent reduction in the \$57.20 tipping fee.

Materials accepted are limited to land clearing waste, demolition debris, and construction debris. Broken concrete is accepted outside of the landfill. It is stockpiled and periodically crushed for use as road fill. Brush, stumps, and yard waste are accepted and ground for use as landscaping mulch and operates under Natural Wood Waster Permit 2011-NWW-0620.

Detailed MDE reports for CY2012 prepared by R.B. Baker & Sons are included in [Appendix K](#), which provide monthly data including construction debris, land clearing debris, yard waste, and white good receipts.

Infinity Recycling, Inc. – While not located in Queen Anne’s County, this is a non-profit organization which operates recycling programs throughout the Midshore region, including Queen Anne’s County. Infinity has an office/processing center located in Millington in Kent County and employs 8 persons. Infinity picks up materials from public schools, offices and residents in Queen Anne’s County. Materials received include mixed cans, newspaper, office paper, cardboard, glass and plastic bottles. In 2013, Infinity collected 52 tons of recyclables in Queen Anne’s County. Infinity operates curbside collection for the Town of Queen Anne and individual subscription curbside collection for other areas in Queen Anne’s County and the Midshore Region.

Drop-Off (Igloo) Recycling Centers

There are 9 drop-off centers in Queen Anne’s County in addition to the County’s five drop-off centers. Each drop-off center is equipped with 8 cubic yard cans or igloo containers. Most centers accept clear glass, green glass, brown glass, metal food and beverage cans, mixed paper, and plastic bottles and jugs. A list of the drop-off centers is included in [Appendix F](#). These sites are also shown on the map located at the back of this plan.

All recycling stations are operated by the Maryland Environmental Service as part of the Midshore Regional Recycling Program, which is funded by the recycling surcharge derived from the tipping fee at the MRSWF. Planning for new igloo stations sites continues on a regional basis.

Public School Recycling

It is the responsibility of the Queen Anne’s County board of County Commissioners (BOCC) to ensure the implementation of the County Schools’ recycling programs. The BOCC has directed that the Queen Anne’s County Board of Education (QABOE) and the Chesapeake College Board of Trustees (CCBOT) have the responsibility for developing the recycling plans and implementing the recycling programs for all of their respective schools. If needed, the BOCC may also direct the Queen Anne’s County Department of Public Works, Division of Solid Waste, to develop recycling plans and implement recycling programs for the respective schools.

A. Queen Anne’s County Public School Recycling Plan:

This plan is to be implemented in compliance with State Law as of October 1, 2010.

Queen Anne’s County Public Schools’ recycling plans must be completed no later than October 1, 2010 and public school recycling programs must be operating no later than October 1, 2010. To date, all Queen Anne’s County Public Schools have recycling plans in place and are participating in a recycling program.

1. Designation of School Recycling Program Implementation and Responsibility:
 - a) QABOE has the responsibility for securing a recycling contract for the County's public schools. This shall be awarded annually and become effective each July 1st. The current contract is for a single-stream program that accepts paper, newspaper, cardboard, glass bottles, steel and aluminum cans, and plastic bottles for recycling. This may or may not change based on market conditions and requirements.
 - b) The recycling contractor is responsible for the marketing of the collected recyclables. This is currently performed by Waste Management. This may or may not change based on market conditions and requirements. The method of marketing may or may not change based on market conditions and requirements.
 - c) The recycling contractor must report, by February 14th of each year, to the County School Maintenance Department Director (Director) the amount and type of recyclables collected for the previous calendar year (e.g., the February 14, 2010 contractor report would contain the totals for calendar year 2009).
 - d) The recycling contractor is responsible for supplying centralized recycling containers for each county public school.
 - e) The QABOE has designated the Director as responsible for the development and implementation of a trash and recycling plan/program for each school. At a minimum:
 - The Director shall report to the QABOE and the Department of Public Works, Division of Solid Waste, by March 1st, on the amount and types of recyclable materials collected each calendar year in a format determined by the Department of Public Works, Division of Solid Waste.
 - Each county public school shall collect all of the materials specified in the QABOE awarded recycling contract (A.1.a., above) for recycling.
 - It is the responsibility of the custodial staff at each county public school to collect recyclables for transport to the contractor recycling bins from the school recycling bins throughout the school.
 - The Director shall set a schedule for the collection of recyclables from each school by the recycling contractor.

- f) The QABOE is responsible for obtaining recycling bins, distributed throughout each school (e.g., in classrooms, by copiers, etc.), for each school.
- g) Each county public school is free to pursue their own separate recycling contract for materials as a method of increasing their school's income to fund their school's programs. Any independent contract a school, or a club within the school, may enter into will not exempt the school from having to collect the materials identified in the QABOE contract (B.1.a., above).
 - The School or club must report to the Director and the Division of Public Works, Division of Solid Waste, by February 14th, on the amount and types of recyclable materials collected each calendar year, independent of the CCBOE contract.
- h) The Director shall advise the QABOE and the Division of Public Works, Division of Solid Waste, of any recycling issues or non-compliance of any school within 30 days of the issue arising. Part of the briefing will include the steps needed to correct any issues.
- i) Corrective actions must begin within 60 days of the issue arising.
- j) The QABOE may request to the BOCC, that their trash and recycling program be operated by another public agency (i.e., Queen Anne's County Department of Public Works, Division of Solid Waste).
- k) The BOCC has the responsibility to direct another public agency to operate the Queen Anne's County Public School's trash and recycling program if deemed necessary by the BOCC or upon request from the QABOE.
- l) The BOCC must make the decision to assign a trash and recycling program to another public agency within 30 days of the QABOE request.
- m) Upon notification by the BOCC to the Queen Anne's County Department of Public Works, Division of Solid Waste, to perform collection, the Department of Public Works, Division of Solid Waste will either prepare bid specifications for collection within thirty (30) days and award a contract for collection within sixty (60) days, or perform the collection itself within one (1) month or prepare bid specifications to acquire equipment to perform collection within nine (9) months of notification.
- n) The Queen Anne's County Department of Public Works, Division of Solid Waste will review the QABOE recycling plan annually, based upon the annual recycling totals reported in accordance with A.1.e., and recommend changes to the BOCC and QABOE by May 1st of each year.

- 2) School Facilities Participating in the Collection of Recyclables:
- a) The QABOE shall direct the Director to bring all Queen Anne's County public schools into compliance with the QABOE trash and recycling plan. Schools include:

Elementary

Bayside		
301 Church St, Stevensville		410-643-6181
Centreville		
213 Homewood Ave, Centreville		410-758-1320
Church Hill		
631 Main St, Church Hill		410-556-6681
Grasonville		
5435 Main St, Grasonville		410-827-8070
Kennard		
410 Little Kidwell Ave, Centreville		410-758-1166
Kent Island		
110 Elementary Way, Stevensville		410-643-2392
Matapeake		
651 Romancode Rd, Stevensville		410-643-3105
Sudlersville		
300 S. Church St, Sudlersville		410-438-3164

Middle

Centreville		
231 Ruthsburg Rd, Centreville		410-758-0883
Matapeake		
671 Romancoke Rd, Stevensville		410-643-7330
Stevensville		
610 Main St, Stevensville		410-643-3194

Sudlersville
600 Charles St, Sudlersville 410-438-3151

Senior

Kent Island
900 Love Point Rd, Stevensville 410-604-2070

Queen Anne's County
125 Ruthsburg Rd, Centreville 410-758-0500

B. Chesapeake College Recycling Plan:

This plan is to be implemented in compliance with State Law as of October 1, 2010.

Chesapeake College (CC) recycling plan must be completed no later than October 1, 2010, and the CC recycling program must be operating no later than October 1, 2010. To date, the CC has a recycling plan in place and is participating in a recycling program.

The Chesapeake College Board of Trustees (CCBOT) oversees and funds the CC. The CCBOT is responsible for the implementation of a recycling plan for the CC.

1) Designation of School Recycling Program Implementation and Responsibility:

- a) CCBOT has the responsibility for ensuring a recycling program for CC. The Midshore Regional Recycling Program (MRRP) and Queen Anne's County Solid Waste Division (QASW) installed a centralized recycling center that accepts paper, newspaper, glass bottles, steel and aluminum cans, and plastic bottles for recycling.
- b) MRRP and QASW are responsible for collecting the recyclables from the centralized recycling center. QASW is also responsible for collecting cardboard and sorted office waste paper from CC. These recyclables are included in QASW recycling figures.
- c) The MRRP and QASW are responsible for the marketing of the collected recyclables. Markets may or may not change based on market conditions and requirements. The method of marketing may or may not change based on market conditions and requirements.

- d) All amounts and types of materials collected are maintained by the Midshore Regional Recycling Program.
 - e) The MRRP is responsible for supplying the centralized recycling center.
 - f) The CCBOT has designated the College's Director as responsible for the development and implementation of a trash and recycling plan/program for the college. At a minimum:
 - The College Director shall report to the CCBOT and the Division of Public Works, Division of Solid Waste, by March 1st, on the types of recyclable materials collected each calendar year from each location in a format determined by the Department of Public Works, Division of Solid Waste.
 - It is the responsibility of the professor, staff and students at CC to collect recyclables for transport to the centralized recycling center from the college recycling bins throughout the college.
 - The MRRP and QASW shall set a schedule for the collection of recyclables from the CC.
 - g) The CCBOT is responsible for purchasing recycling bins, distributed throughout the CC (e.g., in classrooms, by copiers, etc.), for the CC.
 - h) The College Director shall advise the CCBOT and the Division of Public Works, Division of Solid Waste, of any recycling issues or non-compliance of the CC within 30 days of the issue arising. Part of the briefing will include the steps needed to correct any issues.
 - i) Corrective actions must begin within 60 days of the issue arising.
 - j) The Queen Anne's County Department of Public Works, Division of Solid Waste will review the CCBOT recycling plan annually, and recommend changes to the CC and CCBOT by May 1st of each year.
- 2) College Facilities Participating in the Collection of Recyclables:
- a) The CCBOT shall direct the College Director to bring the CC into compliance with the CCBOT trash and recycling plan. The college included in this plan is the:

Chesapeake College

Rt 50 & Rt 213, Wye Mills

410-822-5400

Fluorescent and Compact Fluorescent Light Recycling

Under § 9-1703(b)(11) of the Environment Article, Annotated Code of Maryland, which resulted from House Bill 685 that passed in 2010, Queen Anne's County is required to address the strategy for the collection and recycling of fluorescent and compact fluorescent lights (CFL) that contain mercury. Section 1 meets the requirement of the law. Sections 2 and 3 exceed the requirements of the law. Section 4 indicates that current law also allows for disposal of bulbs up to certain thresholds and for bulbs that pass the TCLP (toxicity characteristic leaching procedure) test.

Section 1: The County and Midshore Regional Recycling Program (MRRP) shall continue to refer residents interested in recycling mercury containing fluorescent bulbs to nearby businesses or entities that accept certain bulbs, and mail-back arrangements that are available. The website www.lamprecycle.org provides an extensive list of firms that provide mail-back recycling of fluorescent bulbs. Currently in the Midshore Region, Lowe's of Easton accepts CFL bulbs for recycling at no charge. This portion of the strategy shall meet the requirements of the law per 2010, House Bill 685 that states in "*SECTION 2. AND BE IT FURTHER ENACTED, That a county may utilize recycling, exchange, and take-back programs voluntarily established by fluorescent and compact fluorescent light manufacturers or vendors in the county's strategy for the collection and recycling of fluorescent and compact fluorescent lighting required under § 9-1703(b)(11) of the Environment Article, as enacted by Section 1 of this Act.*"

The following two recycling strategies would exceed the requirements of the law.

Section 2: In order to provide additional options and convenience to Queen Anne's County residents, mercury containing fluorescent bulbs will be accepted at the Household Hazardous Waste (HHW) collection events that are currently held in the Midshore Region each spring and fall. Event details such as location, date, hours and other details are available from www.qac.org and other websites, flyers, newspaper advertisements, email and postal mailings and other outreach materials. HHW materials are managed by a licensed hazardous waste collection contractor. The contractor's responsibilities regarding the fluorescent bulb collection includes proper packaging, transportation and recycling or proper disposal of all collected material. Bulbs shall be accepted at no charge, as funding and budget priorities allow. Currently the HHW program costs are funded by the Midshore Regional Recycling Program. Fluorescent bulbs were collected starting at the Fall 2011 HHW event. A fee may be considered in the future if costs are determined to be unsustainable.

Section 3: In addition, the County and MRRP will periodically investigate the feasibility, logistics, potential locations, costs, funding needs, funding sources and possible fees to residents for providing recycling of mercury-containing bulbs at one or more locations in the county. The County and MRRP will periodically

gather information including price quotes from reputable firms. Potential grants and other funding sources, including support from fluorescent bulb manufacturers will be sought as needed. Producer responsibility initiatives, such as take-back programs will be encouraged.

Section 4: The County and MRRP will continue to communicate to residents by various means and update information about recycling and disposal options, including the type of products and quantity threshold requirements that allow and preclude disposal of mercury-containing bulbs with municipal solid waste.

In addition to the various recycling options available, current Maryland laws and regulations allow citizens and many entities with less than 200 kg of mercury-containing bulbs (equivalent of approximately 720 4-foot T12 type bulbs) to dispose of mercury-containing fluorescent bulbs with solid waste. Maryland law does require hazardous waste generators and entities with more than 200 kg of mercury containing bulbs per year that do not pass the TCLP test to send the bulbs to a recycling or hazardous waste facility. Bulbs that pass the TCLP are exempt from requirements to recycle bulbs. Some manufacturers sell bulbs with green colored end caps that claim to pass the TCLP test.

Apartment Building and Condominium Recycling Program

Through the cooperation of the Queen Anne's County Solid Waste Division and owners or managers of apartment or councils of unit owners of condominiums ("apartment and condominium officials"), and other stakeholders involved in the implementation of this law, the County has identified 29 apartment building and condominiums that may fall under the scope of the law. The Solid Waste Division has mailed letters to the apartment and condominium officials regarding the requirements of the law including the materials that must be recycled; at minimum, recyclables must include acceptable Plastic, Metal and Glass beverage containers and acceptable Paper Products.

Apartment and condominium officials shall complete and send to the Solid Waste Division a Maryland Recycling Act (MRA) Survey Form, reporting to the County on an annual basis details on the required waste disposal and recycling activities.

Collection of Materials

Apartment and condominium officials directly, or through contracting with a private sector company, are responsible for providing all containers, labor, and equipment necessary to fulfill recycling requirements throughout their buildings. Distinctive colors and/or markings of recycling containers should be provided to avoid cross contamination. The apartment and condominium officials must ensure collection and transportation of recyclable materials from apartment and condominium locations to markets, or other legal

recycling destinations. Residents will be responsible for placing recyclables in recycling containers prior to their removal on the scheduled pick up day.

Marketing of Materials

Apartments and condominium officials are responsible for the marketing or other legal recycling disposition of their recyclables. The apartment and condominium officials shall submit an annual report (survey form) detailing the recycling tonnage removed from the apartment and condominium and the markets or legal recycling destinations for the materials.

Materials Required to be Recycled

Apartment and condominium officials of Condominium shall recycle the following materials:

- Acceptable Plastic
- Metal Beverage Containers
- Glass Beverage Containers
- Paper

Responsible Parties

Entities that will be involved in implementing the law are:

- A. Queen Anne's County Commissioners – Responsible for adopting the MDE approved language of ABCR Program for the Solid Waste/Recycling Management Plan amendment.
- B. Solid Waste Division:
 - Shall provide the ABCR Program information from the State regarding the requirements of the Annotated Code of Maryland with the apartment and condominium officials to develop a recycling program for residents and facilities.
 - Develop the requirements of an ABCR Program.
 - Update/amend the Solid Waste Management Plan to include ABCR Program with revisions to the sections relating to the Queen Anne's County Recycling Plan.
 - Provide a copy of the annual MRA recycling survey form to be used by apartment and condominium officials in reporting recycling activities at the end of each year.
 - Monitor the progress and performance of the ABCR Program.
 - Update a current list of participating apartment building and condominiums at the time of Queen Anne's County's 3-year Plan review. This list will be maintained by the Solid Waste Supervisor.
- C. Owner or Manager of the Apartment building or Councils of the Unit Owners of Condominium:

- Responsible for providing recycling services to the residents of each apartment building or condominium by October 1, 2014.
- Secure and manage recycling contracts with the contractor for providing materials collection and recycling services from the building locations.
- Provide material collection bins and containers of suitable quantity and size for occupants to collect and transfer recyclables to designated areas on site for transporting of the materials from the building to recycling markets.
- Perform record keeping and submit a recycling survey form to the County on an annual basis.

Development/Implementation Schedule for the ABCR Program:

- Prior to October 31, 2013, Queen Anne's County will distribute approved language of the ABCR Program to the apartment and condominium officials for program implementation.
- Prior to March 1, 2014, apartment and condominium officials will educate the residents about the ABCR Program and discuss the requirements of the law.
- Prior to May 1, 2014, apartment and condominium officials will provide training or assistance to the residents and advise them of the date when the residents can start recycling the materials.
- Prior to July 1, 2014, apartment and condominium officials finalize arrangements for the transportation of collected recyclables to acceptable recycling markets.
- On or before October 1, 2014, residents start recycling the materials at the apartment building or condominiums.

ABCR Program Monitoring

Queen Anne's County Solid Waste Division shall monitor the progress and performance of the ABCR Program and shall have the right to inspect for compliance, containers utilized and review records.

The apartment and condominium officials shall be responsible to keep the residents current on new regulations, laws, and mandates affecting recycling and provide new materials, practices and procedures when needed.

The apartment and condominium officials shall initiate actions to correct all deficiencies and perform any other tasks necessary to achieve compliance with State and Queen Anne's County law.

Newly Established Apartment Building and Condominiums

New apartment buildings and condominiums that meet the Annotated Code of Maryland ABCR Program requirements shall begin participating in the program within three months of being notified by Queen Anne's County Solid Waste Division.

Program Enforcement

The Queen Anne's County Solid Waste Division will ensure that the recycling at apartment and condominiums will be implemented in accordance with the Annotated Code of Maryland.

Upon receiving a complaint or record of violation, the Queen Anne's County Solid Waste Division shall institute an investigation, and if a violation exists, a notice shall be issued, in writing, to the responsible party requiring them to correct all deficiencies and perform any other tasks necessary to achieve compliance with the Environment Article.

- Any person, firm or corporation who or which fails to correct, within thirty (30) days from notice from Queen Anne's County, all cited in said violation notice shall be subject to citation for a civil infraction, in accordance with § 9-1711 of the Environment Article of the Annotated Code of Maryland, punishable by a fine of not exceeding \$50 for each day on which the violation occurs and each day said violation shall be permitted to exist shall constitute a separate offense.
- If the citation is not timely paid, Queen Anne's County may enforce the fine by an action in a Maryland court of competent jurisdiction.

Solid Waste Issue 1: The solid waste payment system may contribute to the disposal of Municipal Solid Waste (MSW) through unauthorized avenues and the loss of revenue for the County.

There is no County curbside trash or recycling service. Approximately one-third of the County households hire private contractors for curbside pick-up. The County operates a number of centers where residents may deposit all solid waste after paying for a book of tickets. In addition, one-third of the County households purchase ticket books rather than utilize private curbside services. Together these households who purchase County permits and those who contract for private service account for approximately 66 percent of all County households. The remaining one-third of households dispose of their trash by either utilizing municipal curbside services or by using other undisclosed means.

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**CHAPTER FOUR: ASSESSMENT OF
SOLID WASTE MANAGEMENT ALTERNATIVES**

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Assessment of Solid Waste Management Needs

Disposal – Municipal Waste

The Midshore Regional Solid Waste Facility near Easton previously provided for all of Queen Anne’s County’s municipal waste disposal needs. We define “municipal waste” as residential, commercial, industrial (non-hazardous), institutional, and litter wastes. This facility was designed for a 20-year life, with waste acceptance beginning in March 1991. The Easton location stopped accepting waste on December 31, 2010 and is currently in the process of being capped. Transition to the Caroline County facility in Ridgely started in October 2010 to provide for a layer of “soft trash” to help protect the liner before the Caroline County facility fully opened to all waste on January 2, 2011. The Midshore agreement provides for rotation of the regional landfill site to each participating county. Therefore, upon closure of the regional landfill in Talbot County, Caroline County is hosting the current regional solid waste disposal facility. Queen Anne’s County will follow Caroline County and host the disposal facility beginning in approximately 17 years.

As long as each county and MES uphold their obligations under the Midshore agreement, the project will meet all of the long term municipal waste disposal needs of Queen Anne’s County for well past the 10 year period covered by this Plan. If MES is not able to perform satisfactorily, the four participating counties have an option to take over operation of the facility. Only if the counties also fail in operation of the facility would Queen Anne’s County be forced to locate, design, permit, finance, construct, and operate its own landfill before the currently scheduled timeline.

Disposal – Rubble

There is presently one permitted rubble landfill (R.B. Bakers & Sons, Inc.) that is within Queen Anne’s County. Further, rubble is also accepted at the MRSWF in Talbot County.

The R.B. Baker & Sons, Inc. Rubble Landfill on 4-H Park Road (MD Route 18) near Queenstown is currently the only permitted rubble disposal site in Queen Anne’s County. The current tipping fees are \$62.70 per ton for construction and demolition debris and \$35.20 per ton for land-clearing debris. The owners estimate that the current cell has a remaining life of approximately 6 years (2020). This facility is conveniently located relative to the population centers of Queen Anne’s County. The owners have initiated application with the County to expand the facility to include another 40 acres on the west side Route 18, directly across from the existing rubble landfill. This expansion will provide the County with rubble disposal capacity for a time period well beyond the 10-year planning period.

Dependable Recycling Company operates a recycling facility on U.S. 50 near Wye Mills that accepts some rubble materials. There are no tipping fees for clean concrete, asphalt, brick, block and rocks, which are

recycled into road base material. Raw natural wood, brush, stumps, leaves, grass, woodchips and clean dirt are also accepted at a current tipping fee of \$15.90 per ton.

Collection Systems

Queen Anne's County operates a system of five drop-off centers. These drop-off centers are intended to serve as collection and recycling centers for residents and property owners who do not have curbside collection. The drop-off centers are located near population centers throughout the County. Virtually all areas of Queen Anne's County are located within 10 driving-miles of a drop-off centers. Areas further than a 10 driving-mile radius are Wye Island, areas southeast of Starr and Ruthsburg, a small area near Duck Neck, and areas east of Barclay and Peters Corner. All of these areas have either a low population density, or are served by existing municipal or private curbside collection.

The areas with the greatest driving distance to a Drop-off Center include the town of Queen Anne, which is approximately 14 miles from the Grasonville and Centreville Drop-off Centers. The town has municipal collection, which is contracted to a private hauler. Furthermore, the area along Maryland Route 302 at the Delaware state line, east of Templeville, is about 15 miles from both the Church Hill and Glanding Drop-off Centers.

The County operated drop-off centers currently meet the demands for residential MSW disposal.

Constraints on New Solid Waste Acceptance Facilities

Topography

Queen Anne's County lies on the Atlantic Coastal Plain and has elevations ranging from sea level in the western portion of the County, to approximately 87 feet northwest of Starr. The western portion is a low, almost level plain that is less than 20 feet above sea level in most places. Small bays and tributaries branching off the Chesapeake Bay indent the shores and create many narrow peninsulas, locally known as necks. The western part of the County, including Kent and Wye Islands, are part of the Talbot Plain with elevations from sea level to 45 feet.

The central portion of the County is part of the Wicomico Plain and ranges in elevation from 45 to 80 feet. This is an upland plain that is mostly very gently sloping but in places is moderately rolling. It is well dissected and well or moderately drained in most places. On the eastern side of the County adjoining Caroline County and Kent County, Delaware is a nearly level area marked by a number of depressions locally known as "Delmarva Bays." This area is wet, in some places is swampy, and is very poorly drained.

As a general rule, topography creates few constraints on the location of solid waste facilities in Queen Anne's County. Steep slopes are uncommon, and are usually found adjacent to waterways. The central Wicomico Plain area is best suited for disposal sites, including sanitary landfills, rubble landfills, and land application. Individual sites in most areas, other than the eastern poorly drained region, may be suitable for transfer stations and other similar uses. On-site soils, wetlands, proximity to surface water and similar factors may be more significant as site constraints.

Soil Types

One of the important criteria for the selection of a site for a particular facility is the suitability of soils for the intended use. General soil association information can indicate areas that may be more or less suitable for a use. However, the suitability of a specific site for a specific use may be determined only after an investigation and evaluation of the actual soil types present.

Soils in Queen Anne's County were formed from sediment that was transported by waters of the Susquehanna, Potomac and Delaware Rivers. This sediment was deposited during two stages of the Pleistocene Period, forming the Wicomico Plain and Talbot Plain. The USDA Soil Survey of Queen Anne's County describes six major soil associations:

1. Galestown-Lakeland Downer Association – This association consists of broad areas of nearly level to sloping soils that are generally the most sandy in the County. It occurs in a narrow band along the Chester River in the northern part of the County. It occupies only about 4,800 acres, or 2 percent of the County. The soils are somewhat excessively drained sands and loamy sands that are underlain by a clay water-bearing substratum at a depth of 4 to 6 feet. Most of these soils are located on or near tidal waters.
2. Sassafras-Woodstown Association – This is the most common soil association in the County, occupying more than 110,000 acres, or 46 percent of the County. It consists mainly of level to moderately sloping soils and is found in scattered areas throughout nearly all of Queen Anne's County. The largest area of this association extends north from Centreville. The Sassafras soils account for about three-fourths of the acreage and are deep and well drained. They have a surface layer of friable loam or sandy loam and a thick subsoil of friable sandy clay loam. Except for slope and susceptibility to erosion in small areas, they have practically no limitations that affect their use. The Woodstown soils are generally less sloping and not as well drained. The water table may be high in wet periods for the Woodstown soils.
3. Matapeake-Butlertown Association – This association is made up chiefly of level to strongly sloping areas of deep, silty soils. About half of the association is well drained and the rest is moderately well drained. These soils cover 44,000 acres, or about 19 percent of the County. Because the subsoil restricts drainage, especially in level and nearly level areas, the soils tend to remain wet.

4. Mattapex-Keyport Association – This soil association is mainly nearly level to moderately sloping. Most of the association covers about 38,000 acres, or 16 percent of the County. The major soils in this association are moderately well drained. Due to the characteristic drainage impediments and slow permeability, the Keyport soils are likely to have excessive runoff and are particularly susceptible to erosion.
5. Elkton-Othello Association – Almost all of this association is level or nearly level. It occurs in areas that are fairly well distributed in all parts of the County except the extreme northern and northwestern parts. The association covers about 31,500 acres, or 13 percent of the County. Elkton soils occupy about two-thirds of the total acreage of the association. All the major soils in this association are poorly drained.
6. Fallingston-Pocomoke Association – This association occupies upland flats and slightly depressional areas. Soils are poorly and very poorly drained. The largest area of the association is between Barclay and the Delaware line. The association covers 10,500 acres, or 4 percent of the County.

Geologic Conditions

Queen Anne's County is part of the Atlantic Coastal Plain, a wedge shaped mass of unconsolidated sedimentary deposits. The nearly flat deposits consist of layers of sand, gravel, silt and clay that generally slope toward the southeast. These overlie older crystalline rock.

Known minerals are limited to wide spread deposits of sand, clay and gravel. There is minimal local use of these resources.

Geological considerations for the siting of solid waste acceptance and disposal facilities are specifically defined in COMAR 26.04.07. The geologic conditions existing in Queen Anne's County do not create any general constraints to the location of solid waste acceptance or disposal facilities. However, geologic conditions must be evaluated on a site-specific basis.

Location

The importance of location varies with the type of solid waste acceptance facility being considered. For residential drop-off centers and recycling centers convenient location to residential areas is critical. In Queen Anne's County almost all parts of the County are within 10 miles of an existing Drop-off Center. Additional recycling drop-off (igloo) stations provide additional convenience to the public.

Rubble landfills should be located to minimize hauling distances from major population centers and from areas with high construction activity. Because rubble waste is often bulky, greater distances to disposal sites can greatly increase transportation costs.

Sanitary landfills are the least sensitive solid waste acceptance facility to location constraints. Virtually all waste delivered to these facilities is in compactor trucks. The Midshore Regional Solid Waste Facility in Caroline County currently services the entire four-county Midshore region.

Aquifers

All municipal, industrial and private residential water supplies in Queen Anne's County are obtained from groundwater. Over 70 percent of homes are supplied by individual wells, one of the highest percentages in Maryland.

There are seventeen geologic formations underlying Queen Anne's County. The following are the principal aquifers used for water supply (listed in order of increasing age and depth):

- Columbia Group (Pleistocene-Pliocene)
- Chesapeake Group (Miocene)
- Piney Point Formation (Eocene)
- Aquia Greensand Formation (Eocene-Paleocene)
- Monmouth-Matawan Aquifers (Upper Cretaceous)
- Raritan-Patapsco Formation (Lower Cretaceous)
- Patuxent Formation (Lower Cretaceous)

The aquifers underlying Queen Anne's County are layers of sand and gravel, which are saturated with water. Silt and clay deposits lying between these formations, being less permeable, do not allow the ready accumulation or movement of groundwater. Therefore they act as barriers, known as aquicludes, which may confine and separate the aquifers.

The shallow or water table aquifers of the Columbia Group are used in Queen Anne's County for domestic and agricultural wells. The Columbia Group aquifers are readily recharged by surface streams and percolating rainfall. They are also referred to as unconfined aquifers. This recharge makes them easily contaminated by a variety of pollution sources including agricultural applications and septic tanks.

The Miocene deposits of the Chesapeake Group, including Calvert Formation, frequently act as an aquiclude separating the water table aquifers from deeper confined aquifers. These deep or confined aquifers are less subject to contamination, however, may still be contaminated by leaky casings, poor grouting, natural hydraulic connection with a contaminated aquifer, or contaminated recharge areas. The Aquia Greensand Formation is an important source of supply for many municipal, agricultural, and domestic wells in Queen Anne's County.

In Queen Anne's County, the depth below the surface to all depths of confined aquifers increases towards the southeast. For example, the depth of the Monmouth Aquifer is about 130 feet near Kingstown, and increases to over 600 feet at the town of Queen Anne. The Aquia Greensand Aquifer is near the surface in Chestertown, from 50 to 100 feet deep under Love Point on Kent Island, and over 400 feet deep at the town of Queen Anne.

COMAR 26.04.07.07 establishes standards for groundwater depth below the liner of a municipal landfill. In Caroline, Queen Anne's and Talbot Counties, this minimum buffer is 1.5 feet unless the Department of the Environment determines that the site can provide additional buffer.

Wetlands

Queen Anne's County has 7,912 acres of tidal wetlands. It is very unlikely that a new solid waste acceptance facility will be proposed in a location that directly impacts tidal wetlands. However, non-tidal wetlands occur throughout Queen Anne's County and may be a factor in almost any solid waste acceptance facility siting. The presence of non-tidal wetlands on a site will not necessarily prohibit development of that site. However, it will likely require protection of all or most non-tidal wetland areas and/or mitigation.

Non-tidal wetlands in Queen Anne's County typically have saturated soils or periods of high groundwater level (hydric soils). Vegetation established in these wetlands is adapted to wet conditions and periodic flooding. Queen Anne's County has approximately 86,000 acres of hydric soils; therefore about 36 percent of the County is potentially non-tidal wetlands.

Non-tidal wetlands now receive extensive protection from the U.S. Army Corps of Engineers and the Maryland Department of Environment. The 2010 Comprehensive Plan Update for Queen Anne's County states that:

"Therefore, minimal disturbance will be allowed with proper State and Federal Approvals. Any significant disturbance will still be prohibited under County Regulations."

Surface Waters, Flood Plains, and Water Quality

Natural drainage ways in Queen Anne's County can generally be characterized as areas of somewhat steeper slopes, with vegetation along their edges. These areas were not usually cleared because they were not suitable for farming.

Queen Anne's County has both coastal floodplains and riverine floodplains. Coastal floodplains in some areas extend inland for large distances. Riverine floodplains form natural flood conveyance areas and store floodwaters, slowly releasing them to downstream areas, which lowers the flood peak.

The Queen Anne's County Comprehensive Plan and Zoning Ordinance call for the protection of streams, stream buffer areas, and floodplains.

Detailed Procedures for Siting New Solid Waste Disposal Facilities

The siting process for selecting a solid waste disposal facility site involves the interaction of many complex and inter-related factors. These factors include environmental, technical, economic, social and public policy considerations at both the local and state levels of government. The following site selection objectives provide a hierarchy of these factors that should be used to influence the siting decision while incorporating both quantitative and qualitative considerations into the site evaluation phase through a multi-level screening process.

Environmental Objectives: Evaluation of the effect that the facility will have on the ecosystem of the site, the surrounding area, and the permitting requirements. It includes impacts on wetlands, groundwater, surface water, endangered species, archaeological sites, historical sites, and environmentally sensitive areas.

Technical Objectives: Evaluation of the physical location and daily operational requirements such as access to roads, traffic management, buffers, size and type of facility, soils, easements, sediment and erosion controls, noise, dust, fumes, and odor controls, stormwater management and site utilization.

Economic Objectives: Evaluation of the economics involved to establish the site and the financial impacts on near-by neighbors of the facility.

Social and Public Policy Objectives: Evaluation of the impact to and reaction of local citizens, industry, and others to the siting process and final decision. In order for the siting process to be effective, the methodology must consider the future impacts of the decision, involve the public, and take conflicting views into consideration providing appropriate feedback to the County decision makers.

Site selection for a solid waste disposal facility is one of the most volatile issues that local governments must face. This type of public policy position, no matter how sensitive to the concerns for residents, will make some people feel they will be negatively impacted. If a solid waste disposal facility is to be successfully sited, the aforementioned objectives must be identified and addressed in order to find a means to resolve controversial community issues. The burden of proof to address these objectives and demonstrate the need is the responsibility of the applicant. To accomplish this overall goal an evaluation of alternative sites must be performed for any proposed solid waste disposal facility. The initial application requesting consideration must include a written narrative that addresses each of the objectives outlined above. The formal written application to County Officials will set the review process in motion.

The siting process for solid waste disposal facilities involves a three-level evaluation using the various objectives and constraints as screening criteria as described below. The first level screening process identifies constraints that would render a particular solid waste disposal site as unsuitable based on general environmental, land use and technical criteria. The second level screening involves development of a ranking system based on impacts to recommended buffer zones and other required or specifically designed objectives and constraints that may not eliminate a particular site from consideration. The third and final level screening provides a formal process for the review of preferred sites as recommended by a Solid Waste Advisory Committee and engages the general public for review and comment. The concluding acceptability of a facility siting decision resulting from this phase rests with the Board of County Commissioners.

The process of site selection shall be evaluated in three levels by which potential sites are screened and reduced to a few probable sites. Involvement of and communication with a Solid Waste Advisory Committee and the general public during the evaluation process is essential to gather input, consider opposing views and to determine which sites are most appropriate for a solid waste disposal facility. The Solid Waste Advisory Committee shall be appointed by the County Commissioners to serve as required based on the need demanded by specific proposals.

First Level Screening for Solid Waste Disposal Facilities

First Level Screening identifies all inherent constraints, which would not allow a solid waste management site at a particular location due to conditions that render the site unacceptable for further investigation. First level screening criteria shall include all of the constraints identified below in Table 4-1.

Table 4-1: Level I Screening for Solid Waste Disposal Facility Sites Probable Exclusionary Constraints

1. The minimum road frontage for any solid waste disposal facility shall be 80 feet.
2. The minimum gross acreage for any solid waste disposal facility shall be 100 acres.
3. Solid waste disposal facilities shall have a commercial entrance and be located on a major collector/highway or higher classification roadway.
4. A demonstrated need within Queen Anne's County shall be a prerequisite for considering the potential siting of any solid waste disposal facility.
5. New solid waste disposal facilities shall be horizontally located a minimum of 1,500 feet from the nearest home or institutional building, 2,500 feet from a potable water supply or well head that is used for human or animal consumption and 500 feet from any church, public library, public parkland or other public facility as measured from the site property lines.
6. Proposed facilities shall comply with specific requirements of development districts, village centers, and town centers.

7. Areas within a one-half mile radius of any public or private school or hospital as measured from the centroid of the property.

Second Level Screening for Solid Waste Disposal Facilities

Second Level Screening involves assessing the constraints, which, by virtue of their nature, do not absolutely disqualify a particular site from further consideration. Second level screening is an evaluative process in qualitative and quantitative terms. Criteria for this level shall include all of the constraints listed in Table 4-2. The Solid Waste Advisory Committee may incorporate additional constraints at this screening level if they are determined to be of value to the overall site selection and decision making process by majority committee consensus.

The Solid Waste Advisory Committee develops a “Site Feasibility Matrix” to rank and compare the sites based on the overall second level screening criteria. The site comparison will provide documented reasons for elimination of non-feasible sites from further investigation. The end result of second level screening will be a list of potential sites for third level screening involving public review and further investigation.

Each of the criteria within the screening categories in Table 4-2 and others as recommended by the Solid Waste Advisory Committee will be assigned a numerical “acceptance value” (1-acceptable, 2-marginal, 3-unsatisfactory). The respective acceptance values are then multiplied by a corresponding numeric “impact value” (1-no impact, 2-negligible impact, 3-moderate impact and 4-significant impact) to provide a weighted “acceptance impact” rating.

The acceptance impact ratings are tallied to obtain the overall score of each site. The lesser overall total score being a site with better attributes for consideration. The sites will be ranked in order of their respective scoring to determine the preferred location(s) for the proposed solid waste disposal facility. A short list of preferred sites based on the results of the above evaluation may be developed for further analysis.

Table 4-2: Level II Screening Constraints for Solid Waste Disposal Facility Sites Qualitative and Quantitative Constraints

1. Recommended Undisturbed Property Line Buffer Zone Requirements:

<u>Type of Solid Waste Disposal Facility</u>	<u>Buffer</u>
Incinerator	650'
Municipal Solid Waste Landfill	500'
Construction & Demolition Rubble Landfill	500'
Land Clearing Debris Landfill	500'
Sludge Disposal or Sludge Storage	300'

2. Water Source Protection Areas
3. Chesapeake Bay Critical Areas
4. Natural Resource Areas (includes rivers, streams, springs, wetlands and their buffers)
5. Tidal, Non-Tidal and Riverine Floodplains
6. Other known habitats of Federal and State protected animals and plants
7. Natural Heritage Registered Sites
8. Historic Districts and Historic Sites
9. Areas in close proximity to Federal, State, and local parks, and conservation areas
10. Exclusion areas surrounding airports
11. Existing and planned residential developments, including rural subdivisions and village centers
12. Existing and planned institutional land uses
13. Areas dominated by hydric soils, highly erodable soils, steep side slopes (>15 percent), or unsuitable geology
14. When possible, solid waste disposal facilities should be located on land degraded by previous industrial activities.
15. Areas of commercially significant mineral deposits

Third Level Screening for Solid Waste Disposal Facilities

County Staff and the applicant will conduct field inspections of the potential short listed site(s) with the Solid Waste Advisory Committee and County officials as determined by the second level screening.

County Staff and/or the applicant will conduct final investigations and prepare a conceptual engineering and operational analysis of the site(s) selected for a concept plan review. The minimum site-specific criteria that shall be addressed for this analysis are outlined in Table 4-3.

Table 4-3: Site Specific Criteria

1. All applicable buffers, setbacks and constraints identified in the level I and level II site screening process
2. Boundary survey and topography
3. Proposed landscape features, screening and site aesthetics
4. Site access and internal circulation plan including a description of proposed construction materials

5. Infrastructure improvements to roads, sewer systems, water systems and other required public utilities
6. Prevention Plans to avoid Nuisances and Unsanitary Conditions
7. Site geology and soil conditions
8. Hauling routes to and from the proposed facility
9. Any available groundwater data and/or aquifer data
10. Drainage and stormwater management
11. Operations Plan
12. Leachate Disposal Plans
13. A Host Community Plan
14. Site End Use Plan
15. Estimated Facility Capacity and Developmental Costs

County Staff and the Solid Waste Advisory Committee will conduct a joint work session with the Planning Commission and County Commissioners to present the findings and a ranked list of preferred sites and their recommendations for any further analysis or evaluation refinements.

County Staff and/or the applicant will conduct an open public participation meeting to obtain community input into the decision-making process and to present site-specific data obtained in the final site investigation. The County Commissioners and the Solid Waste Advisory Committee shall arrange and oversee this meeting.

The final site selection shall be made by the County Commissioners, based on the overall evaluation outlined herein, any and all field or site investigation data obtained for the record, the recommendations of the Planning Commission, the Solid Waste Advisory Committee and public opinion.

Land Use and Growth Patterns

As discussed in Chapter Two, the Queen Anne's County Land Use and Development Code "Title 18" does not permit solid waste facilities in any of the zoning districts, unless it is jointly determined by the County Administrator, the Planning Commission Chairperson and the Director of Planning and Zoning to be a public necessity or public service use. This plan shall not be used to create or enforce local land use and zoning requirements.

Asbestos Disposal Capacity

The Midshore Regional Solid Waste Facility in Caroline County is authorized to accept friable and non-friable asbestos waste. This facility provides adequate disposal capacity for asbestos waste for Queen Anne's County.

Hazardous Waste Accident Response

The Queen Anne's County Department of Emergency Services and the Fire Chief's Association has a Standard Operating Guideline (SOG) for hazardous materials incidents and chemical spills. When a potential incident call is received, the SOG mandates the immediate dispatch of the closest fire department, ambulance, paramedic, and law enforcement body. Based on information received, the Department of Emergency Services has the option of dispatching additional resources.

The SOG was developed and updated by the Department of Emergency Services and the Fire Chief's Association. COMAR 26.03.03.03E 4e requires an assessment of the programs and procedures necessary to respond to an emergency spill of hazardous materials within the County. It is hereby determined that the existing programs and procedures as outlined in the Queen Anne's County SOG are adequate, but that they shall be subject to regular review and refinement by the Queen Anne's County Department of Emergency Services and the Fire Chief's Association.

Non-hazardous, petroleum contaminated soils and other materials resulting from spills and site mitigations cannot be disposed at any facility located within Queen Anne's County. Current practice is to dispose of such materials at the Midshore Regional Solid Waste Facility in Caroline County. Cleanup efforts are coordinated with the Maryland Department of the Environment's Emergency Response Program.

The Midshore Household Hazardous Waste (HHW) Collection Project provides residents with an opportunity to dispose of household hazardous waste that otherwise may pose environmental, health and safety risks. While the household status makes HHW exempt from most of the regulations governing hazard, proper and professional management of these materials is still prudent. The Maryland Environmental Service took over the organizing of the HHW collection events in July 2012. Currently HHW collections are offered in the four-county Midshore Region to all Midshore residents twice a year, typically in the spring and fall. The collection location rotates among the four Midshore counties, therefore is held in Queen Anne's County every two years.

Recycling Programs

In the 2012 legislative session, the Maryland General Assembly passed House bill (HB) 929: Environment – Recycling Rates and Waste Diversion – Statewide Goals, Chapter 692, Acts of 2012 (the "law"). The law takes effect on October 1, 2012, and requires full implementation of the county's revised recycling plan by December 31, 2015. The law also requires the county to revise its recycling plan by July 1, 2014. The plan must include a provision that provides for a reduction through recycling of at least 20% by weight of their

municipal solid waste stream for a county with a population less than 150,000. Only certain materials can be used as the basis for determining the amount of recyclables retrieved from the total waste stream. These materials are designated as “MRA Wastes” and include municipal and commercial solid waste, yard waste, white goods, and metals from homeowners. Excluded from the definition of MRA Wastes are: hospital waste, rubble, scrap metal (except scrap metal that is collected at disposal facilities), land clearing debris, sewage sludge, and waste deposited in a facility dedicated solely for waste from a single generator. These materials are designated as “non-MRA wastes.” Therefore, recycling of any of the excluded materials does not count toward the County’s 20 percent target. White goods and metal cans are considered as MRA wastes, even if collected by junkyards. Tires are considered MRA waste if they are recycled in some fashion. Tires that are used as a fuel source by incineration are defined as non-MRA waste.

The 2012 Recycling Rates and Waste Diversion Goals law sets a voluntary statewide waste diversion goal of 60 percent by 2020. The waste diversion rate is a combination of the MRA recycling rate and a source reduction credit. A source reduction credit of up to 5 percent can be earned by Counties for waste diversion activities such as utilizing Internet resources, demonstration sites (e.g., backyard composting), publication on reuse practices and yard waste reduction and **other** activities. [Appendix L](#) provides facts about recycling and source reduction credit for 2011 in Maryland. One aspect related to source reduction in Queen Anne’s County and the Midshore Region is the development currently underway by the MRRP of a Reuse Directory and other techniques to divert reusable commodities from the waste stream and even prior to recycling activities.

In July 1990, the Maryland Environmental Service (MES) prepared and submitted separate recycling plans for Caroline, Queen Anne’s, and Talbot Counties. Kent County prepared and submitted its own separate recycling plan. This Recycling Plan is incorporated into this Comprehensive Solid Waste Management Plan by reference.

In 1993 all four counties executed an agreement and formally joined together to form a regional consortium, the Midshore Regional Recycling Program (MRRP). Its goal is to share equipment, technical, financial, recycling, and other resources in order to achieve the greatest recycling outcome throughout the region at the least cost. The MRRP has been able to secure guaranteed outlets for recyclables during a time when these markets began to close their doors to smaller, individual programs in favor of larger programs or those who could afford to meet more restrictive specifications. A copy of the agreement between MRRP and Queen’s County is incorporated by reference.

To fund the regional recycling program, a surcharge is collected on the base tipping fee for each ton of waste disposed at the Midshore Regional Solid Waste Facility. This surcharge is currently set at \$5.00 per ton.

The MRRP has recommended focus areas in which program development is anticipated to yield either greater cost savings to the regional solid waste/recycling management or improvement in current programs for a sounder environmental outcome. These include Source Reduction of Solid Waste:

Stimulate home composting among regional residents.

Develop waste reduction/recycling incentive policies.

Examine opportunities for operating or encouraging reuse and waste exchange programs.

Discuss the feasibility of solid waste composting in accordance with the requirement in Section 9-1703(b)(7) of the Environment Article, Annotated Code of Maryland.

Residential recycling programs in the region are typically publicly operated. Chapter Three, "Solid Waste Acceptance Facilities", describes the recycling centers in Queen Anne's County. These include the five drop-off centers operated by the Department of Public Works, plus 11 drop-off centers equipped with recycling containers (See [Appendix F](#)). Recyclables collected throughout the region by MRRP are consolidated at three primary sites: the Midshore Recycling Consolidation Facilities located at the Midshore Regional Solid Waste Facilities in Talbot County and Caroline County; and the Nicholson Drop-off facility in Kent County. These facilities allow smaller loads to be consolidated and then shipped in bulk to processors and markets.

The Queen Anne's County Department of Public Works, Solid Waste Division provides a recycling collection service to government facilities, schools and some businesses. The current collection program includes pick-up of white office paper and cardboard from approximately 100 locations. These materials are consolidated at the Queen Anne's County Recycling Center at the Centreville Drop-off Center. Inmate labor crews have been enlisted to process and bale cardboard for market delivery. A listing of the offices and businesses serviced is included in [Appendix G](#).

In 2012, Queen Anne's County exceeded its recycling target of 15 percent by recycling 52.68 percent of its MRA solid waste as part of the MRRP program. This figure includes recycling of 38,677 tons of corn ensilage, which is counted as MRA waste. Recycling data and rates are shown in [Appendix I](#) for CY2012.

As described by in the 1992 Annual Report for the MRRP, the economics of recycling are an important issue. From design to implementation, collection to marketing, recycling programs rarely break even let alone turn a profit. Cost-avoidance studies prove to be valuable in streamlining existing programs and making the most of available funds while acknowledging the future dividends of keeping trash out of landfills. The real factor in deciding to maintain or modify a program depends on the price tag of other available disposal methods: on the Eastern Shore, this would be landfilling. Many recycling programs try to justify their costs by demonstrating the program's ability to help avoid the costs of otherwise disposing of these materials. However, many analyses of cost avoidance fail to account for the whole cost of disposal, reporting tipping fees but not costs for collection and transportation, transfer site operation, hidden operating costs, or the value of delaying capital outlay for infrastructure associated with landfills such as new roads, electrical

upgrades, the rising costs to meet new facility mandates, and the financing, consulting, engineering and infrastructure costs that go with siting a new landfill.

When evaluating the costs of recycling compared with disposal, it is necessary to quantify the environmental and economic impact of both options. With recycling, this includes the savings from avoided groundwater contamination, avoided landfill tipping fees, development of jobs and the local economy, and communal energy savings and greenhouse gas emission reductions. The MRRP program receives bid prices for all commodities, except cardboard, before transporting to markets. The bid price and cost of transportation is used to determine the destination market. Cardboard is currently transported to the Queen Anne’s Recycling Center for baling and transportation. Queen Anne’s pays the MRRP program based on the market index and signed contract.

A serious consideration in long range planning for recycling is the volatility of commodity prices for recyclables. Table 4-4 below presents pricing history in recent years for OCC (Old Corrugated Cardboard) from revenue received for loose and baled cardboard transported to markets from the Queen Anne’s County Recycling Program.

Table 4-4: Prices for OCC

	Low	High
2004	\$0	\$100
2005	\$35	\$40
2006	\$20	\$100
2007	\$70	\$145
2008	\$25	\$135
2009	\$25	\$80
2010	\$100	\$193
2011	\$105	\$183
2012	\$65	\$135
2013	\$85	\$140

OCC Old Corrugated Cardboard

Staff has identified the following points and key recycling issues:

1. Recycling programs and a 20 percent diversion of recyclables materials from the waste stream is mandatory in Maryland.
2. Queen Anne’s County and regional recycling rates exceed the 20 percent requirement.

3. People enjoy recycling once they become accustomed to it and consider it an important social and environmental goal.
4. All commodities collected by recycling programs are not presently self-sufficient, but recycling protects long-term goals and resources of our society. “Recycling doesn’t make money, but it does make sense.” When avoided landfill costs are considered, recycling provides significant communal savings (in the hundreds of thousands to millions of dollars) in terms of avoided tip fees representing avoided use of landfill space and other disposal costs related to avoided landfill fees. Roadside litter pickup is extraordinarily costly in terms of cost per ton. Does that mean that we should not provide this service? In this case the communal benefit of collecting litter within the means of available resources is a worthwhile effort. This same line of thought could be applied to recycling commodities of marginal economic value that may provide additional benefits.
5. Tools such as an Environmental Benefits Calculator may prove to be a useful tool to further make the case for recycling.

**CHAPTER FIVE: SOLID WASTE MANAGEMENT
PLAN OF ACTION: 2015-2025**

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Plan of Action

Solid Waste Disposal and Acceptance Facilities

The following solid waste disposal and acceptance facilities will be in use for Queen Anne's County during the 10-year planning period:

Sanitary Landfills:

Midshore II Regional Solid Waste Facility – This facility currently located in Caroline County will continue to be the primary disposal site for municipal solid waste during the planning period. This facility will reach capacity and close no later than 2030. Queen Anne's County will host the next Midshore Regional Landfill Facility per the Midshore County Regional Agreement. This facility will have a capacity for approximately 20 years.

Rubble Landfills:

Midshore II Regional Solid Waste Facility – This facility in Caroline County is operated by MES and is continuing to accept rubble waste in the regular lined cell. Continuation of this practice reduces the amount of landfill capacity available for municipal solid waste, and ultimately shortens the life of the facility.

R.B. Baker & Sons, Inc. – This facility located near Queenstown will continue to provide the main rubble disposal capacity for Queen Anne's County. The owners estimate that the capacity of the current cell will be fully utilized in 6 years (2020). The owners have initiated application with the County to expand the facility to include another 40 acres on the west side of Route 18, directly across from the existing rubble landfill. This expansion will provide the County with rubble disposal capacity for a time period well beyond the 10-year planning period.

Rubble Recycling Facilities:

Dependable Recycling Co. – This facility on U.S. 50 near Wye Mills accepts some rubble materials for recycling, including concrete, asphalt, brick, block, rocks, raw natural wood, brush, stumps, leaves, grass, woodchips, and clean dirt. It is well located to serve most of Queen Anne's County.

Residential Drop-off Centers:

All five existing drop-off centers will continue in operation to accept residential solid waste and recyclables. These facilities are: Batts Neck, Centreville, Church Hill, Glanding Road, and Grasonville.

It is possible that the number of drop-off centers will be reduced as part of a comprehensive curbside program initiative.

Recycling Drop-Off Centers:

The 16 existing igloo recycling stations will be continued in operation (subject to agreement by the property owners). Additional stations may be added as needed to improve convenience and program success.

Management of Waste Streams

The following mechanisms will be used for managing each of the waste streams identified in [Table 3-1](#) (Existing and Projected Solid Waste Generation). The permitting of all solid waste acceptance facilities within Queen Anne's County is also subject to the requirements of COMAR 26.04.07 "Solid Waste Management" as well as applicable local ordinances and regulations.

Commercial, Residential, Industrial & Institutional Waste:

All waste in these categories is currently disposed of at the Midshore II Regional Solid Waste Facility in Caroline County. This facility will continue to be the sole waste disposal facility for these wastes during the planning period. However, Queen Anne's County should keep other options open for consideration during the next 10 years. Local municipalities and other county residents currently use private solid waste companies that either own or are associated with private and municipal landfills other than Midshore II.

The available options include diversion of municipal solid waste, if economical, to out-of-state landfills. This has some potential due to the recent development of several large commercial municipal and private landfills in Virginia and Delaware. These facilities now contract to receive the municipal solid waste from several Maryland counties. They have a lower tipping fee than the Midshore II Regional Solid Waste Facility, presumably due to the very large economy of scale. This option would require agreement by all four Midshore counties. The transfer station located at the facility could serve the purpose of exporting solid waste to landfills outside the region. A comprehensive financial analysis to evaluate hauling costs, tipping fees and the on-going costs for servicing bonds and maintenance of a "mothballed" Midshore II Regional Solid Waste Facility would be needed as part of the decision process.

Other options include: 1) Expansion of the Midshore group to include other Eastern Shore counties. Currently Dorchester County owns and operates a 27-acre municipal solid waste landfill with room for expansion; and, 2) Cooperation with the Delaware Solid Waste Authority to potentially develop a solid waste management system for the entire Delmarva Peninsula.

An increase in the percentage of the waste stream that is recycled will conserve landfill capacity and thereby extend the life of the MRSWF. However, reducing the tonnage of waste received will increase the unit cost of disposal per ton, since fixed and operating costs are somewhat constant.

Brush, Land Clearing, Construction, Demolition, and General Rubble:

Most of this waste is currently disposed or recycled at the R.B. Baker & Sons, Inc. rubble landfill near Queenstown. A small amount of this waste is also disposed or recycled at the Midshore II Regional Solid Waste Facility in Caroline County. The recycled materials primarily consist of the Brush and Land Clearing waste streams.

R.B. Baker & Sons, Inc., will continue to be the main disposal site for rubble waste in Queen Anne's County. The current cell capacity will last for approximately 6 years (2020). The owners have initiated application with the County to expand the facility to include another 40 acres on the west side Route 18, directly across from the existing rubble landfill. This expansion will provide the County with rubble disposal capacity for a time period beyond the 10-year planning period. With proceeds from the recycling surcharge fund, the owners of the facility acquired a tub grinder and stump splitter in order to divert these materials from the landfill. Under Natural Wood Waster Permit 2011-NWW-0620 the wood waste is ground and sold for use as landscaping and sold

Most rubble waste generated within Queen Anne's County and the Midshore region is potentially recyclable, although these recycling programs are expensive. If recycling of rubble waste becomes more economical, then increased recycling at all rubble acceptance sites, including County drop-off centers and private facilities, could reduce the future rubble disposal requirement.

The County accepts grass, leaves and general yard waste less than 3 inches in diameter at all of the drop-off centers. These materials are periodically ground for use as landscaping material by MES through a program sponsored by MRRP. The end product mulch is available to the general public for a modest fee. In addition, this material has been distributed free of charge during annual special events.

Controlled Hazardous Substances:

Hazardous wastes generated in Queen Anne’s County are presently disposed at permitted sites outside the County. This practice will continue, as there is insufficient demand or need for such a facility in the County.

There are a number of private commercial firms on the Eastern Shore that are licensed to collect and transport hazardous wastes from Queen Anne’s County. There are limited hazardous waste disposal or storage facilities located in Maryland. According to MDE, about 75 percent of all hazardous wastes generated in Maryland are shipped out of the state. Much of the remaining hazardous waste treated or disposed within Maryland is handled at facilities dedicated to a specific industry, and not open to general public use. The only open hazardous waste treatment facility in Maryland is Clean Harbor of Baltimore, Inc., which specializes in wastewater treatment and solvent processing. All other Maryland hazardous waste facilities are storage or transfer facilities.

Other out-of-state facilities, which are common disposal points for Maryland hazardous wastes, include:

Midland Disposal, Michigan	Large quantities of hazardous waste
Chemical Conservation, Georgia	Gasoline, paint, contaminated oil
Republic Environmental, Hatsfield, PA	Restricted industrial wastes
Laidlaw, North Carolina	Restricted industrial wastes
Culver City, Kentucky	Hazardous waste incinerator

Dead Animals:

Much of this material is now recycled through commercial rendering facilities outside of Queen Anne’s County. Valley Proteins in Baltimore is the only rendering plant known to be currently accepting animal wastes from Queen Anne’s County. These current management practices are adequate.

Appliances and Junk Cars:

Federal Environmental Protection Agency regulations under the Clean Air Act, Section 608, establish a mandatory recycling program for ozone depleting refrigerants such as chlorofluorocarbon (CFC) during disposal of all air conditioning and refrigeration equipment. The following appliances must be segregated for appropriate disposal by a certified recycling contractor:

- Refrigerators
- Freezers
- Air conditioners

- Water coolers
- Dehumidifiers
- Any other appliances that contain Freon, etc.

These materials are currently recycled through an agreement with Bakers to evacuate all CFC or PCB toxins. These current practices are adequate.

Junk cars are recycled through private commercial salvage yards. Queen Anne's County does not license junkyards or auto salvage yards.

Tires:

Section 9-228 of the Annotated Code of Maryland prohibits disposal of scrap tires in a landfill after January 1, 1994. Queen Anne's County currently does not operate any tire landfill.

Passenger and light truck tires 17 inches or less in diameter are accepted at the County drop-off centers and loaded into 40-yard roll-off containers. Tires from County vehicles are collected at the Roads Yard. The collected tires are then transported to a licensed tire facility for recycling, currently Auston Contracting in Joppa, MD. Commercially generated tires, truck tires, and farm equipment tires are not accepted by Queen Anne's County.

Antifreeze, Waste Oil and Gasoline:

The Maryland Environmental Service (MES) operates the waste antifreeze and oil-recycling program. MES currently contracts with U.S. Filter to pick up oil and antifreeze from collection tanks at recycling stations throughout the region. Most of this waste oil is refined for use as heating oil. Most of the used antifreeze is reused and returned to market as recycled antifreeze. Gasoline is disposed of following proper disposal procedures.

Sewage Sludge:

Sewage sludge generated in Queen Anne's County is currently disposed of by a variety of practices, including land application, composting, and transport to the Midshore II Regional Solid Waste Facility. These current management practices are adequate and are expected to continue.

It is the responsibility of each sludge generator to provide adequate storage and management of sludge during the winter months when weather conditions prohibit land application. The Maryland Department of the Environment recommends that a minimum of four months of storage be considered.

Septage:

Most septage generated in Queen Anne's County is disposed at the Kent Narrows/Stevensville/Grasonville Wastewater Treatment Plant. However, companies based in those counties are probably transporting some septage collected in Queen Anne's County to disposal sites in neighboring counties.

Current septage management practices in Queen Anne's County are adequate.

Poultry Manure:

All of the poultry litter or chicken manure generated in Queen Anne's County is land applied to farmland as a nutrient source for the soil. These current management practices are adequate and expected to continue.

Sizing, Staging, and Capacity of Solid Waste Facilities

See Chapters Three, Four, and previous sections of Chapter Five.

Collection Systems

Due to the high cost of establishing and operating drop-off centers, it is not recommended that additional drop-off centers sites be established to serve outlying areas of Queen Anne's County. The County may consider consolidating existing drop-off centers as part of a comprehensive curbside collection program.

The increasing population density in some areas of the County may make it desirable for the County to begin a system of residential curbside collection. Potential service areas include: Kingstown, Bennett's Point, Prospect Bay, Grasonville, and all of Kent Island (including subdivisions such as Cloverfields, Bay City, Kent Island Estates, Romancoke, Chester Harbor, Dominion, Gibson's Grant etc.). In addition, the County could work with and encourage the Towns to expand their curbside collection contracts to serve areas outside of their respective corporate limits.

The County contracted with Gershman, Brickner and Bratton, Inc, (GBB) to complete the 2005 "Study of County-Administered Contract Districts for Collection of Residential Waste and Recyclables in Queen Anne's County". A County-administered system of contract districts for curbside collection was concluded to:

Lower costs to residents by 38%

Increase Recycling Rates to 50%

Reduce traffic, pollution and road wear by eliminating redundant hauling services by multiple providers

Reduce number of drop-off centers from 5 to 3 subsequently lowering operational program costs

The County-administered system for curbside collection services will be handled by private waste haulers that are contracted by the County (similar to the Town Municipal contracts). The County could collect payment for the service via taxes or an independent utility billing system. Solid waste collection districts can be created under the authority of Title 25.

Though no additional steps were taken in 2005 implement this program a County Curbside Program is very much a viable option moving forward as continue to evaluate our Solid Waste Program. Transitioning to a contract curbside collection program would be a significant challenge for the County. The major steps necessary to plan, develop and implement this program would include:

Complete a Comprehensive Study for a County-administered curbside collection program

Develop Action Plan and Schedule

Design a Public Education Campaign

Establish Collection Districts and Routes

Develop Program Administration and Ordinances

Conduct Public Education Campaign

Establish all Administrative and Legislative Needs

Prepare Procurement Solicitation and Contracts

Conduct Procurement and Award Contracts

Begin Operations, Monitor and Adjust as Needed

Schedule for New Solid Waste Facilities

No new municipal solid waste disposal facilities are planned in Queen Anne's County during the 10-year planning period. December 31, 2010 was the last day of operation at the Midshore Regional Solid Waste Facility in Talbot County. The Midshore Regional Solid Waste Facility in Caroline County opened January 2, 2011 and will operate for a 20-year period or approximately until 2030.

The only new or expanded solid waste acceptance facilities, which will be required in Queen Anne's County during the planning period, are possibly new or consolidated drop-off centers.

R.B. Baker & Sons, Inc. has initiated application with the County to expand the facility to include another 40 acres on the west side of Route 18, directly across from the existing rubble landfill. This expansion will provide the County with rubble disposal capacity for a time period well beyond the 10-year planning period.

Financing Proposed Solid Waste Facilities

As discussed above, no new publicly owned municipal solid waste disposal facilities are planned in Queen Anne's County during the 10-year planning period. The Midshore Regional Solid Waste Facility and its future development is financed by the Maryland Environmental Service, utilizing its revenue bonding authority and by tipping fees collected at the site.

Continued expansion and improvement of the recycling program is expected under guidance of the MRRP. Financing for both capital and operating costs of the recycling program is obtained from the tipping fee surcharge at the Midshore Regional Solid Waste Facility. An additional source of funding for recycling programs is the 10 percent surcharge on tipping fees at the R.B. Baker Rubble Landfill. These funds have been programmed to supplement the continuation of the central materials consolidation facility (MCF) at the Centreville Drop-off Centers and for continued rubble and land clearing debris recycling activities at the R.B. Baker facility.

Closure Plans

No public solid waste acceptance facility in Queen Anne's County is expected to cease operations during the planning period.

Amending and Updating the Plan

State Law, pursuant to Title 9, Subtitle 5 of the Environment Article, Annotated Code of Maryland, as well as COMAR 26.03.03, requires the governing body of the County, after reasonable opportunity for public hearing, to adopt a triennially revised County Comprehensive Solid Waste Management Plan and have it approved by MDE.

The adopted Plan for Queen Anne's County and its incorporated Towns shall be reviewed and updated at least triennially. For this purpose, municipal and County agencies, as well as owners of private facilities and other federal or State agencies having programmed solid waste management facilities, will be furnished copies of the draft changes for comment. A public hearing with the County Commissioners will then be held. Notice of the public hearing shall be advertised in the Record Observer newspaper or other local paper once each week for two consecutive weeks with the first notice appearing at least fourteen days prior to the public hearing. Following the public hearing, the County Commissioners shall take appropriate action.

Following the decision of the County Commissioners, the updated Plan shall be sent to MDE for its review and final approval. The updated Plan will not become effective until notification of final approval is received from the State.

In addition, COMAR 26.03.03.05 requires that the comprehensive solid waste management plan shall be revised or amended to include the installation or extension of either a solid waste acceptance facility or solid waste disposal system before the issuance of a permit by MDE. The same public hearing process outlined above for the triennial update shall be used for any revision.

As discussed in Chapter Two, the Queen Anne's County Code (Title 18 – Land Use) does not permit any new solid waste acceptance facilities in any of the zoning districts.

Summary of Recommendations

The following is a summary of recommendations for programs, plans, regulations, procedures, and policies as a result of this Comprehensive Solid Waste Plan update:

1. Continue with the policy that designates the Midshore Regional Solid Waste Facility as the sole waste disposal facility for municipal solid waste generated in Queen Anne's County. However, Queen Anne's County will keep other options open for consideration during the next 10 years.
2. Queen Anne's County has an obligation under the Midshore Regional Agreement to provide a future regional landfill site. This site will not be needed for approximately 17 years. The County purchased a 124-acre farm adjacent to the Centreville Drop-off Center in order to host the third Midshore Regional Solid Waste Facility. The Department of Planning and Zoning and the Department of Public Works should conduct a preliminary review of this site and develop long-range plans to ensure that adequate public facilities are provided and compatibility with the Comprehensive Land Use Plan is maintained. Key criteria in this review include: access to the site and future transportation patterns, soils, wetlands, surrounding land uses, adjacent zoning districts. A sign designating the future use of this property should also be posted near the site to inform the general public.
3. The R.B. Baker & Sons, Inc., rubble landfill will continue to be the main disposal site for rubble waste in Queen Anne's County. The secondary site for rubble disposal will continue to be the Midshore II Regional Solid Waste Facility.
4. Queen Anne's County should periodically review the drop-off center operations and fee system to see if it is effectively accomplishing its objectives.
5. Queen Anne's County continue to evaluate the merits of a County-administered system of contracted districts for curbside collection of solid waste and possibly recyclables for residential properties as outlined in the 2005 study by GBB.
6. It is recommended that Queen Anne's County begin using the authority of Title 25 of the County Code to license private firms that collect and transport solid waste.

7. Queen Anne's County will continue to proactively promote recycling efforts that fit within the annual budget constraint established by the regional surcharge fund. Promotional efforts will emphasize both the importance of recycling and recycling economics. Queen Anne's County will continue to pursue the highest diversion of materials from the waste stream that can be economically handled. New recycling programs will focus on those materials that can provide the greatest weight diversion for the least cost, such as programs to promote composting or recovery of yard waste and organics before they reach public facilities. Source reduction and reuse of materials should also be encouraged through public outreach efforts and implemented where feasible. Queen Anne's County will continue to proactively promote recycling efforts that fit within the annual budget constraint established by the regional surcharge fund. Promotional efforts will emphasize both the importance of recycling and recycling economics. Queen Anne's County will ensure the implementation of the requirements of the 2012 "Recycling Rates and Waste Diversion – Statewide Goals" Act by December 31, 2015.
8. The County should continue to support the Household Hazardous Waste Collection and "eCycle" events sponsored by the Midshore Regional Recycling Program.
9. The County should continue to explore expansion possibilities of the Materials Consolidation Facility with available funding sources in order to centralize additional recyclable processing activities.
10. The County should conduct a comprehensive review and update of Title 25 of the County Code entitled "Solid Waste" to ensure consistency with other policies and plans.
11. The County should consider establishing more stringent user policies at the five County-operated drop-off centers including:
 - Greater enforcement to minimize commercial and out-of-county wastes that enter the drop-off center sites from small businesses.
12. The County and its regional partners should investigate innovative, emerging and effective policies and technologies that could improve upon current systems as well as direct future goals and planning. Narrowly focused, this may be in the form of examining specific policy, accounting, collection or processing approaches. With a broader whole-systems view, the County and its regional partners should consider the simple goal of Zero Waste and the far-reaching resource and community implications it represents. Zero Waste is a design principle that seeks to redesign the way resources and materials flow through society by advocating 'cradle to cradle' philosophies in order to promote clean production, prevent pollution and create communities in which all materials are safely cycled back to the economy or environment for productive reuse and nothing is wasted.
13. The County should encourage Municipalities to require the delivery of all municipal solid waste to the Midshore II Regional Facility via their municipal waste contracts awarded to private haulers.

Solid Waste Policy 1A: Provide solid waste and recycling services that promote lawful and environmentally sound waste disposal by County residents.

Implementation Strategies:

1. Update the County's solid waste master plan.
2. Consider encouraging new private development to include curbside pick-up.

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REFERENCES

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3. State of Maryland. *Title 26 Department of the Environment Subtitle 3, Water Supply, Sewerage, Solid Waste, and Pollution Control Planning and Funding; Chapter 3 Development of County Comprehensive Solid Waste Management Plans*.
4. State of Maryland. *Title 26 Department of the Environment, Subtitle 4 Regulation of Water Supply, Sewage Disposal, and Solid Waste; Chapter 7 Solid Waste Management Plans*.
5. *Intergovernmental Agreement between The Counties of Caroline, Kent, Queen Anne's and Talbot*. October 1993.
6. MDE, *Maryland Source Reduction Diversion Rate Summary*. 2014.
7. *Solid Waste Collectors Survey in Queen Anne's County*. September 2014.
8. *Municipal Solid Waste Collection System Survey in Queen Anne's County*. September 2014.
9. MDE, *Solid Waste Management and Diversion Report 2013 (Calendar Year 2012 Data)*
10. MDE, *Solid Waste Tonnage Report, Permitted Acceptance Facilities* (R.B. Baker & Sons, Inc.). 2012.
11. MDE, *Solid Waste Tonnage Report, Permitted Acceptance Facilities* (Midshore Regional SWF). 2012.
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GLOSSARY

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List of Terms

Agricultural Waste - "Domestic animal manure or residuals in liquid or solid form generated in the production of poultry, livestock, fur-bearing animals, and their products. Agricultural waste includes residuals generated in the production and harvesting but not of subsequent processing of all agricultural, horticultural, or aquacultural commodities. Agricultural waste does not include land clearing debris unless the cleared land is intended solely for agricultural purposes." (COMAR 26.04.07.02)

Biodegradable Material - Waste material which is capable of being broken down by microorganisms into simple, stable compounds such as carbon dioxide and water. Most organic wastes, such as food wastes and paper, are *biodegradable*.

Bulky Waste - Large items of refuse including, but not limited to, appliances, furniture, large auto parts, non-hazardous construction, demolition materials, trees, branches and stumps which cannot be handled by normal solid waste processing, collection and disposal methods.

Commercial Waste - Waste materials originating in wholesale, retail, institutional or service establishments, such as office buildings, stores, markets, theaters, hotels or warehouses.

Commingled Recyclables - A mixture of several recyclable materials in one container.

Compactor - Power-driven device used to compress materials to a smaller volume.

Compost - The relatively stable decomposed organic material resulting from the composting process. Also referred to as humus.

Composting - "The process in which organic solid waste is biologically decomposed under controlled conditions to yield a nuisance-free humus-like product." (COMAR 26.04.07.02)

Construction and Demolition Waste - Materials resulting from the construction, remodeling, repair or demolition of buildings, bridges, pavements and other structures.

Corrugated Paper - Paper or cardboard manufactured in a series of wrinkles or folds, or into alternating ridges and grooves.

Curbside Collection - Programs where recyclable materials are collected at the curb, often from special containers, to be brought to various processing facilities.

Decomposition - Breaking down into component parts or basic elements.

Diversion Rate - A measure of the material being diverted for recycling compared with the total amount that was previously thrown away.

Drop-off Center - A centralized facility where waste is unloaded from several small collection vehicles and loaded into larger vehicles for hauling to processing or disposal facilities; could include the use of loading and compacting machinery; A method of collecting recyclable materials in which the materials are taken by individuals to recycling igloos and deposited into designated containers.

Ferrous Metals - Metals that are derived from iron. They can be removed using large magnets at separation facilities.

Flow Control - A legal or economic means by which waste is directed to particular destinations. For example, a contract requiring that certain wastes be sent to a combustion facility is waste *flow control*.

Garbage - Spoiled or waste food that is thrown away, generally defined as wet food waste. It is used as a general term for all products discarded.

Ground water - Water beneath the earth's surface that fills underground pockets (known as aquifers) and moves between soil particles and rock, supplying wells and springs.

Hazardous Waste - Waste material that may pose a threat to human health or the environment, the disposal and handling of which is regulated by federal law.

Hazardous Waste Landfill - A sanitary (lined) landfill that accepts hazardous waste. Hazardous waste may pose a threat to human health or the environment; therefore, the handling and disposal of the waste is strictly regulated by federal law. Waste processing procedures and facilities are highly dependent on the type of waste disposed at the landfill.

Incinerator - A facility in which the combustion of solid waste (e.g., municipal, medical) occurs. The recovery of energy from the combustion process may or may not occur. Incinerators are generally classified as a mass-burn facility, a refuse derived fuel facility, or waste to energy facility.

Waste-to-Energy Facility (WTEF) - A centralized facility that reduces the quantity of MSW and recovers energy (as steam or electricity) through the combustion of MSW. A WTEF generally includes the following components: (1) a waste handling and storage facility (e.g., storage pit, cranes, front-end loaders, etc.); (2) a combustion unit; (3) energy recovery facilities (boiler, turbine, generator, etc.); (4) ash collection; and (5) air emission pollution control equipment (e.g. bag house, electrostatic precipitators, scrubbers, etc.). A WTEF may be either a mass-burn or a refuse derived fuel facility.

Industrial Waste - "Any liquid, gaseous solid, or other waste substance, or combination thereof, resulting from: a) any process of industry, manufacturing, trade or business; or b) the development of any natural resource, including agriculture." (COMAR 26.08.01.01)

Infectious Waste - "Any waste that comes from a hospital, clinic, or laboratory and that is known or suspected to be contaminated with organisms capable of producing disease or infection in humans. Infectious waste includes disposable equipment, instruments, utensils, contaminated needles, scalpels, and razor blades, human tissue and organs that result from surgery, obstetrics, or autopsy, feces, urine, vomitus, and suctionings, live vaccines for human use, blood and blood products, laboratory specimens such as tissue, blood elements, excreta, and secretions." (COMAR 26.04.07.02)

Institutional Waste - Waste materials originating in schools, hospitals, prisons, research institutions and other public buildings.

Land-Clearing Debris – Naturally occurring debris, such as stumps, trees, and yard wastes.

Landfill - (Sanitary Landfill) "an engineered method of disposing of solid wastes on land in a manner that minimizes public health and environmental hazards, and is designed, installed, and operated according to the provision of these regulations." (COMAR 26.04.07.02)

Leachate - Liquid that has percolated through solid waste or another medium and has extracted, dissolved, or suspended materials from it, which may include potentially harmful materials. *Leachate* collection and treatment is of primary concern at municipal waste landfills.

MRA - Maryland Recycling Act of 1988.

MRA Materials - Waste or Recycled commodities that are considered under MRA guidelines to have originated from municipal and commercial sources and typically would be disposed at municipal solid waste facilities unless they are recycled. Certain wastes are excluded as noted in Non-MRA materials.

Non-MRA Materials - Wastes or Recycled commodities excluded from MRA guidelines and recycling rate calculations are materials that are collected for disposal or recycling such as Hospital waste (special waste), land clearing debris, rubble, scrap material, sewage sludge, and waste generated by a single individual or business and disposed of in a facility dedicated solely for that entity's waste.

Materials Recovery Facility (MRF)- A centralized facility that receives, separates, processes and/or markets recyclable materials that have been previously separated from the municipal solid waste stream. A MRF for separated recyclables can be designed to handle all types of recyclables or just certain categories (e.g., paper, corrugated, plastics, glass, steel, aluminum, etc.), and may include a variety of processing equipment such as balers, crushers, air classifiers, magnetic separators, optical separation systems (for glass), and loading and transportation equipment.

Methane - An odorless, colorless, flammable and explosive gas produced by municipal solid waste undergoing anaerobic decomposition. *Methane* is emitted from municipal solid waste landfills.

Microorganisms - Microscopically small living organisms that digest decomposable materials through metabolic activity. *Microorganisms* are active in the composting process.

Monitoring Well - "Any hole made in the ground to examine groundwater." (COMAR 26.04.07.02)

Municipal Solid Waste Composting - The controlled degradation of municipal solid waste after some form of preprocessing to remove non-compostable inorganic materials.

Mulch - Ground wood waste used as a protective ground covering around plants to prevent evaporation of moisture and freezing of roots and to nourish the soil.

Municipal Sanitary Landfill - An engineered solid waste acceptance facility permitted under the requirements of MDE. The facility is designed, installed, and operated to minimize public health and environmental hazards. The municipal sanitary landfill is the final disposal site for wastes generated by a community with the exception of those wastes specifically prohibited by MDE and Queen Anne's County regulations.

Municipal Solid Waste - Includes non-hazardous waste generated in households, commercial and business establishments, institution and light industrial wastes, agricultural wastes, mining waste and sewage sludge.

Municipal Solid Waste Landfill - A county (or regional county consortium-) owned, centralized facility for the long-term land disposal of MSW without creating nuisances or hazards to public health or safety. A state-of-the-art municipal waste landfill includes the following technologies and operating features: (1) covering the disposed MSW with clean soil or other suitable cover material at the end of each day; (2) composite, double, or double composite liners; (3) leachate collection and storage systems; (4) leachate treatment; (5) landfill gas control and recovery; (6) proper closure and capping of filled landfill cells; and (7) environmental protection monitoring (i.e., check of incoming landfill wastes for hazardous or other unsuitable materials, groundwater monitoring wells, domestic water supply monitoring, etc.). Operation of a municipal waste landfill requires

heavy machinery for distributing and compacting the MSW; excavating; hauling and stockpiling cover material; and constructing new landfill cells and closing old landfill cells.

Organic Waste - Waste material containing carbon. The organic fraction of municipal solid waste includes paper, wood, food wastes, plastics and yard wastes.

Participation Rate - A measure of the number of people participating in a recycling program compared to the total number that could be participating.

Recyclables - Materials that still have useful physical or chemical properties after serving their original purpose and that can, therefore, be reused or remanufactured into additional products.

Recycling - The process by which materials otherwise destined for disposal are collected, reprocessed or remanufactured and reused.

Recycling Drop-off Center- A facility where recyclable materials can be dropped-off for collection by the agency. Facilities similar to MSW drop-off center (and could be combined with an MSW, yard waste, or waste oil and antifreeze drop-off center), including separate disposal containers for different categories of recyclable materials.

Refuse - See Solid Waste

Residential Waste - Waste materials generated in single and multiple-family homes.

Residue - Materials remaining after processing, incineration, composting, or recycling have been completed. *Residues* are usually disposed of in landfills.

Resource Recovery - A term describing the extraction and utilization of materials and energy from the waste stream. The term is sometimes used synonymously with energy recovery.

Resource Recovery Facility - "A processing facility at which component materials of solid waste are recovered for use as raw material or energy sources." (COMAR 26.04.07.02)

Reuse - The use of a product more than once in its same form for the same purpose; e.g., a soft-drink bottle is reused when it is returned to the bottling company for refilling.

Rubble Landfill - A centralized facility that receives, separates and processes land-clearing and construction and demolition (LCD and C&D) debris, such as trees, brush, rock, concrete, asphalt, brick, plaster and steel. Rubble processing may utilize crushers and grinders to reduce the volume of C&D and LCD wastes, and thus maximize the efficiency and handling of such wastes. C&D and LCD wastes can be processed for reuse and recycling (e.g., crushed rock, wood compost, scrap metal, etc.) or for disposal in a rubble landfill.

Scrap - Discarded or rejected industrial waste material often suitable for recycling.

Septage - Material removed from chemical toilets, septic tanks, seepage pits, privies or cesspools.

Sewage - "The water-carried human, domestic and other wastes and includes all human and animal excreta." (COMAR 26.04.02.01)

Sludge - A semi-liquid residue remaining from the treatment of municipal and industrial water and wastewater.

Soil Liner - Landfill liner composed of compacted soil used for the containment of leachate.

Solid Waste - "Any garbage, refuse, sludge, or liquid from industrial, commercial, mining, or agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage or in irrigation return flows." (COMAR 26.03.03.01)

Solid Waste Acceptance Facility - Any transfer station, recycling drop-off station, or waste processing facility whose primary purpose is to process or aggregate solid waste.

Solid Waste Disposal Facility - Any incinerator, municipal solid waste-, rubble- or land-clearing debris - landfill whose primary purpose is to dispose of solid waste.

Solid Waste Management - "The systematic administration of activities which provide for the collection, source separation, storage, transportation, transfer, processing, treatment, re-use, or disposal of solid waste." (COMAR 26.03.03.01)

Source Reduction - The design, manufacture, acquisition and reuse of materials so as to minimize the quantity and/or toxicity of waste produced. *Source reduction* prevents waste either by redesigning products or by otherwise changing societal patterns of consumption, use and waste generation.

Special Medical Waste - See Infectious Waste.

Tipping Fee - A fee, usually dollars per ton, for the unloading or dumping of waste at a landfill, transfer station, drop-off center, recycling center, or waste-to-energy facility; also called a disposal or service fee.

Transfer Station - A centralized facility where waste is unloaded from several small collection vehicles and loaded into larger vehicles for hauling to processing or disposal facilities; could include the use of loading and compacting machinery.

Tub Grinder - Machine to grind yard and wood wastes for mulching, composting or size reduction.

Waste Oil and Antifreeze Drop-off Facility - A facility where used motor oil and antifreeze can be dropped-off for collection by the agency or private operator, includes vehicle access to drop-off tanks for oil and antifreeze.

Waste Stream - A term describing the total flow of solid waste from homes, businesses, institutions and manufacturing plants that must be recycled, burned or disposed of in landfills; or any segment thereof, such as the "residential waste stream" or the "recyclable waste stream."

Waste-to-Energy - Conversion of solid waste to energy, generally through the combustion of processed or raw refuse to produce steam and electricity.

Water Table - Level below the earth's surface at which the ground becomes saturated with water. Landfills and composting facilities are designed with respect to the water table in order to minimize potential contamination.

Wetland - Area that is regularly wet or flooded and has a water table that stands at or above the land surface for at least part of the year. Coastal wetlands extend back from estuaries and include salt marshes, tidal basins, marshes and mangrove swamps. Inland non-tidal wetlands consist of swamps, marshes and bogs. Federal regulations apply to landfills sited at or near wetlands.

White Goods - Large household appliances such as refrigerators, stoves, air conditioners and washing machines.

Yard Waste - Leaves, grass clippings, brush, prunings, and other natural organic matter discarded from yards and gardens.

Zero Waste - Zero Waste is a design principle for the 21st Century that seeks to redesign the way resources and materials flow through society. Zero Waste requires eliminating subsidies for raw material extraction and waste disposal, and holding producers responsible for their products and packaging 'from cradle to cradle.'

The goal is to promote clean production, prevent pollution, and create communities in which all products are designed to be cycled safely back into the economy or environment. (Source: www.grrn.org/zerowaste/index.html)

Many of the definitions in this glossary were obtained from EPA's Decision Maker's Guide to Solid Waste Management, Volume II, (EPA 530-R-95-023), 1995. Project Co-Directors: Phillip R. O'Leary and Patrick W. Walsh, Solid and Hazardous Waste Education Center, University of Wisconsin-Madison/Extension.

APPENDICES

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Appendix A: MDE 2012 Sludge Generation, Export, and Import Report for Queen Anne's County

24 Permitted Septic Haulers.

Queen Anne's County Sludge Generators (WWTPs):

Centreville	200 wet tons
Chesapeake College	38 wet tons
Queenstown	551 wet tons
KNSG WWTP	1,851 wet tons
Millington	73 wet tons
Church Hill	0 wet tons
Sudlersville	0 wet tons
TOTAL	2,713 wet tons

*Only KNSG WWTP Sludge is land applied in QA Co.

Imported Sludge:

Out of State	0 wet tons
Out of County	<u>10,403 wet tons</u>
TOTAL	10,403 wet tons

Queen Anne's County Sludge Exported to Talbot County:

Centreville	0 wet tons
KNSG	65 wet tons
Queenstown	<u>0 wet tons</u>
TOTAL	65 wet tons

Chesapeake Community College sludge goes to KNSG WWTP.

There are 31 permitted land application sites in Queen Anne's County.

Source: QAC Environmental Health Department, 2012 Data

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Appendix B: Inbound and Outbound Septage Report for the Kent Narrows/Stevensville/Grasonville Wastewater Treatment Plant (2012-2013)

Month	Total - Gal	Total - Gal (w/ 10%)	Total - Tons	Total - Tons (w/ 10%)	"A" Plus								
					Annapolis	Sanitation	Ken Burns	Leonards	Park's Septic	Thomas E Pierson	Ruth Brothers	Safe Harbor	Septic Services
1/1/2012	189,049	207,954	788	867	4,143	0	28,074	0	62,795	1,742	60,056	660	31,579
2/1/2012	188,023	206,825	784	862	2,947	0	45,615	1,726	53,227	1,729	46,008	575	36,196
3/1/2012	204,075	224,483	851	936	0	3,159	35,519	5,855	55,434	937	63,847	250	39,074
4/1/2012	217,271	238,998	906	997	6,279	4,146	20,088	1,912	59,934	596	76,723	645	46,948
5/1/2012	245,313	269,844	1,023	1,125	5,016	2,143	18,339	0	55,405	3,388	74,179	2,200	84,643
6/1/2012	305,208	335,729	1,273	1,400	4,192	2,143	26,846	5,125	80,072	2,918	68,661	2,775	112,476
7/1/2012	286,219	314,841	1,194	1,313	1,538	0	47,612	1,738	78,144	1,096	68,683	3,225	84,183
8/1/2012	230,541	253,595	961	1,057	1,648	0	47,664	0	51,502	0	38,105	3,250	88,372
9/1/2012	285,729	314,302	1,191	1,311	0	1,108	68,334	939	62,018	1,194	57,617	400	94,119
10/1/2012	234,154	257,569	976	1,074	0	14,773	50,043	0	66,780	553	47,704	0	54,301
11/1/2012	208,001	228,801	867	954	0	2,145	43,756	1,447	67,858	1,119	52,694	0	38,982
12/1/2012	179,028	196,931	747	821	593	0	42,124	0	48,037	456	50,784	0	37,034
2012 Totals	2,772,611	3,049,872	11,562	12,718	26,356	29,617	474,014	18,742	741,206	15,728	705,061	13,980	747,907
1/1/2013	158,962	174,858	663	729	0	0	42,226	0	42,540	0	52,021	0	22,175
2/1/2013	177,817	195,599	741	816	0	0	37,625	1,726	55,956	444	49,792	0	32,274
3/1/2013	227,876	250,664	950	1,045	0	3,153	73,739	5,855	62,524	0	45,229	0	37,376
4/1/2013	258,618	284,480	1,078	1,186	1,018	1,454	57,382	1,912	95,282	0	64,439	900	36,231
5/1/2013	275,009	302,510	1,147	1,261	1,758	0	56,062	0	79,053	0	55,612	2,750	79,774
6/1/2013	295,793	325,372	1,233	1,357	5,045	1,504	65,476	3,791	96,543	1,776	38,726	1,400	81,532
7/1/2013	287,650	316,415	1,200	1,319	4,466	0	53,962	0	106,493	488	46,673	2,805	72,763
8/1/2013	204,217	224,639	852	937	9,817	0	28,216	1,673	56,197	573	41,229	0	66,512
9/1/2013	292,233	321,456	1,219	1,340	12,177	0	64,483	0	77,142	488	69,641	2,750	65,552
10/1/2013	203,661	224,027	849	934	7,506	0	57,214	2,186	40,798	1,087	47,151	1,400	46,319
11/1/2013	164,043	180,447	684	752	15,405	1,192	43,176	5,447	20,401	1,242	43,187	0	33,993
12/1/2013	600,119	660,131	2,502	2,753	11,223	0	432,173	6,973	37,040	2,754	90,880	0	19,076
2013 Totals	3,145,998	3,460,598	13,119	14,431	68,415	7,303	1,011,734	29,563	769,969	8,852	644,580	12,005	593,577

*We used the average weight of H₂O (8.34 lbs / gallon) to convert to tons.

**Data obtained from QAC Sanitary District Month-End Reporting Database - April 30, 2014

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Appendix C: Monthly Ticket Collection Data for 2013; by Drop-off Center

DATE	BATTS NECK			CENTREVILLE			CHURCH HILL			GLANDING			GRASONVILLE			TOTALS				
	SW	CFC UNITS	TIRES	SW	CFC UNITS	TIRES	SW	CFC UNITS	TIRES	SW	CFC UNITS	TIRES	SW	CFC UNITS	TIRES	SW	CFC UNITS	TIRES	TKTS	
Jan	2544	60	2	1239	0	2	1022	0	6	740	0	10	1979	10	45	7524	70	65	7659	
Feb	1946	0	0	1055	10	9	704	10	2	670	0	16	1565	20	2	5940	40	29	6009	
Mar	2968	10	4	1425	10	7	978	0	11	944	0	33	2196	20	2	8511	40	57	8608	
Apr	2981	20	0	1521	20	9	937	0	25	840	0	31	2506	10	36	8785	50	101	8936	
May	3353	30	22	1415	0	15	993	0	23	922	10	28	2559	0	12	9242	40	100	9382	
Jun	3225	20	2	1677	0	24	1036	0	14	934	0	25	2667	40	1	9539	60	66	9665	
Jul	3085	70	10	1727	10	23	865	0	2	814	0	20	2496	20	11	8987	100	66	9153	
Aug	3197	20	31	1661	10	23	1121	0	23	1079	0	31	2767	40	21	9825	70	129	10024	
Sep	2687	30	5	1387	10	18	791	0	16	759	10	5	2168	0	6	7792	50	50	7892	
Oct	2489	10	2	1318	0	8	903	0	21	743	0	27	2250	0	0	7703	10	58	7771	
Nov	2992	30	0	1431	0	18	930	10	6	943	0	26	2209	10	0	8505	50	50	8605	
Dec	2331	10	9	1343	10	8	879	0	100	759	0	26	2153	20	4	7465	40	147	7652	
TOTAL	33798	310	87	17199	80	164	11159	20	249	10147	20	278	27515	190	140	99818	620	918	101356	
% by type	34%	50%	9%	17%	13%	18%	11%	3%	27%	10%	3%	30%	28%	31%	15%					
GRAND TOTAL	34195			17443			11428			10445			27845							
%	34%			17%			11%			10%			27%							
Avg tickets / week	640			332			216			192			530							

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Appendix D: CY2012 MDE Reports - MRSWF

Facility Name: Midshore II Regional Solid Waste Facility

Refuse Disposal Permit #: 2005-WMF-0608

MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Suite 610 • Baltimore, Maryland 21230-1719

410-537-3314 • 800-633-6101 x3314 • www.mde.state.md.us

Land Management Administration • Waste Diversion and Utilization Program

Solid Waste Tonnage Report for Calendar Year 2012

Facility Name:	Midshore II Regional Solid Waste Facility	
Refuse Disposal Permit No.:	2005-WMF-0608	
Name of Permit Holder:	Maryland Environmental Service	
Facility Street Address:	12236 Ridgely Road	
Facility City, State, Zip:	Ridgely, MD 21660	
Facility Telephone No.:	410-634-9304	
Facility Fax No.:	410-634-9302	
Contact Name:	Charles Ingram	
Contact Title:	Deputy Chief	
Contact Street Address:	259 Najoles Road	
Contact City, State, Zip:	Millersville, MD 21108	
Contact Email:	c Ingr@menv.com	
Contact Telephone No.:	410-729-8648	
Contact Fax No.:	410-729-8383	

If you have questions on how to complete this form, please call the Maryland Department of the Environment's Waste Diversion and Utilization Program at 410-537-3326.

Facility Name: Midshore II Regional Solid Waste Facility

Refuse Disposal Permit #: 2005-WMF-0608

SECTION A. Waste Accepted

Table A1 – Waste Accepted Supplemental page(s) attached? Yes No (if "YES" go to end)

Origin	STATE →	Maryland	Maryland	Maryland	Maryland	TOTAL	
	COUNTY →	Caroline	Kent	Queen Anne	Talbot		
MSW	Residential	9399.17	6307.56	12799.78	3299.74	31,806.25	
	Commercial	5813.51	4710.13	14405.24	4924.96	29,853.84	
	Mixed				32803.16	32,803.16	
	MSW Ash ¹					0.00	
Other Wastes	Non-MSW Ash ¹					0.00	
	Asbestos	32.13	3.11	10.56	44.75	90.55	
	Asphalt					0.00	
	C&D ¹	3671.9	617.59	844.85	2281.94	7,416.28	
	Concrete ¹					0.00	
	Industrial					0.00	
	LCD	42.2	31.73	1.71	29.49	105.13	
	Front-end Scrap Metal					0.00	
	Back-end Scrap Metal					0.00	
	Scrap Metal	3.9			0.28	4.18	
	Scrap Tires	6.87		2.14	6.04	15.05	
	Sewage						
	Sludge	1280.89	228.82	73.73	483.63	2,067.07	
	Soil	6.18	3.23	57.14	53.31	119.86	
	Special Medical Waste					0.00	
	Other 1: List* Amount	170.58		0.32	1043.14	1,214.04	
	Other 2: List* Amount	585.06	7.79	41.13	3784.8	4,418.78	
	Other 3: List* Amount	4.67			14.76	19.43	
	Other 4: List* Amount					0.00	
	Other 5: List* Amount					0.00	
	TOTAL	21,017.06	11,909.96	28,236.60	0.00	48,770.00	0.00
	TOTAL WASTE ACCEPTED A1 ▶▶						109,933.62

¹ See Section A for definitions and additional information.

* Includes materials such as, but not limited to, white goods, compost, wood waste, yard waste, food waste, electronics, pallets, and textiles. See Section A for definitions and additional

Facility Name: Midshore II Regional Solid Waste Facility

Refuse Disposal Permit #: 2005-WMF-0608

SECTION B. Waste-to-Energy/Incinerator Facilities ONLY

1. Tonnage of MSW ash generated from solid waste accepted at facility:
2. Tonnage of Non-MSW ash generated from solid waste accepted at facility:
3. Tonnage of by-pass generated from solid waste accepted at facility:

SECTION C. Total Amount of Waste Managed at Facility in 2011

TOTAL IN TABLE A1	109,933.62	A1
MSW ASH GENERATED (WTE ONLY)	0.00	B1
NON-MSW ASH GENERATED (WTE ONLY)	0.00	B2
BY-PASS GENERATED (WTE ONLY)	0.00	B3
Stored Waste from Previous Year *		C1
GRAND TOTAL (A1+B1+B2+B3+C1) ^	109,933.62	C2

* Means the waste that was temporarily stockpiled at the site in the previous year but wasn't managed until the current year. See Section C for instructions and additional information.

^ The total reported in C2 MUST equal the total tons reported in Section D (See Section E).

SECTION D. Methods of Solid Waste Management

Table D1 – On-Site Management (In Tons)

	Landfilled	Incinerated	Projects at Landfills ^	Stored	Reused (RU) or Recycled (RC) or Composted/Mulched (CM)			TOTAL
					RU	RC	CM	
MSW	94463.25				RU	RC	CM	94,463.25
MSW Ash ¹					RU	RC	CM	0.00
Non-MSW Ash ¹					RU	RC	CM	0.00
Asbestos	90.55				RU	RC	CM	90.55
Asphalt					RU	RC	CM	0.00
C&D ¹	7416.28				RU	RC	CM	7,416.28
Concrete ¹					RU	RC	CM	0.00
Industrial					RU	RC	CM	0.00
LCD	105.13				RU	RC	CM	105.13

Facility Name: Midshore II Regional Solid Waste Facility

Refuse Disposal Permit #: 2005-WMF-0608

Front-end Scrap Metal ¹					RU	0.00
					RC	
					CM	
Back-end Scrap Metal ¹					RU	0.00
					RC	
					CM	
Scrap Metal ¹					RU	0.00
					RC	
					CM	
Scrap Tires					RU	0.00
					RC	
					CM	
Sewage Sludge	2067.07				RU	2,067.07
					RC	
					CM	
Soil	119.86				RU	119.86
					RC	
					CM	
Special Medical Waste					RU	0.00
					RC	
					CM	
Stored Waste (C1)					RU	0.00
					RC	
					CM	
Other 1*: Clean rubble			1214.04		RU	1,214.04
					RC	
					CM	
Other 2*: Wood Waste			4418.78		RU	4,418.78
					RC	
					CM	
Other 3*: Animal Carcasses / Road kill	19.43				RU	19.43
					RC	
					CM	
Other 4*: [list]					RU	0.00
					RC	
					CM	
Other 5*: [list]					RU	0.00
					RC	
					CM	
TOTAL TONS (D1)	104,281.57	0.00	5,632.82	0.00	0.00 RU	109,914.39
					0.00 RC	
					0.00 CM	

^A Means the use of solid waste or other materials for projects at landfills (e.g., daily cover, road construction, etc.).

¹ See Section D for definitions and additional information.

* Includes materials such as, but not limited to, white goods, compost, wood waste, yard waste, food waste, electronics, pallets, by-pass, and textiles. See Section D for definitions and

Facility Name: Midshore II Regional Solid Waste Facility

Refuse Disposal Permit #: 2005-WMF-0608

F4. What is the total tons of solid waste and other materials accepted per month?

January	February	March	April	May	June
9,435.51	9,059.87	10,183.96	9,477.46	10,625.79	10,234.85
July	August	September	October	November	December
8,802.65	9,496.62	8,078.66	8,316.13	8,686.12	7,536.00

F4 TOTAL 109,933.62

A1 TOTAL 109,933.62

Note: the F4 total MUST equal the A1 total.

Include A Copy Of The Current Tip Fee And Other Charges For Your Facility With This Report

Facility Name: Midshore II Regional Solid Waste Facility

Refuse Disposal Permit #: 2005-WMF-0608

SECTION G. Additional Information to be Submitted by Permitted LANDFILL Facilities

		Cubic Yards (yd ³)	Tons
G1.	Total permitted landfill capacity.	7,800,000.00	4,680,000.00
G2.	Total amount of solid waste landfilled for 2012	190,159.00	109,914.39
G3.	Total amount of solid waste landfilled to date.	506,539.00	246,497.95
G4.	Total remaining permitted landfill capacity.	7,293,461.00	4,433,502.05
		Percent	
G5.	Percent of total permitted landfill capacity used for 2012	2.35	
		Year	
G6.	Projected calendar year when landfill will reach capacity.	2053	
		Number	
G7.	Number of permitted cells in landfill (as identified in approved plans).	Five (5)	
G8.	<p>A topographic map must be generated by a survey performed within the last three months of the reporting period.</p> <p>The topographic map is to accurately describe the permitted landfill area. The map is to be signed and sealed by a professional land surveyor; be drawn to a scale between 1" = 40' and 1" = 200', as appropriate; and at a minimum, contain the following information:</p> <p>(a) The total permitted cell acreage; (b) The total amount of solid waste landfilled to date; and (c) The total remaining permitted landfill capacity.</p>		

SECTION H. Certification

This is to certify that, to the best of my knowledge, the information contained in this report and any attached documents are true, accurate, and complete.

	Charles Ingram, Deputy Chief	
Signature	Name and Title (print or type)	Date

Facility Name: Midshore II Regional Solid Waste Facility

Refuse Disposal Permit #: 2005-WMF-0608

Optional Information Relating to the Economic Benefits of the Facility

Note: Suggested questions to assist in providing requested the requested information are provided in Italics

1. The facility's economic benefits provided to the locality where the facility is located.

(e.g.: Types of economic benefit provided, taxes paid, services provided, etc. How do the economic benefits provided impact the locality?)

2. Value of the disposal and recycling facilities provided to the locality at no cost or at a reduced cost.

(e.g.: Does the facility replace or complement any government services or facility?)

3. Direct employment associated with the facility.

(e.g.: How many people does the facility employ? Types of jobs? Total value of salaries paid to employees?)

4. Other economic benefits resulting from the facility during the reporting period

(e.g.: Estimated value of goods and services purchased from the locality for the facility? Estimated value of materials produced or recycled for the year? Estimated value of savings to taxpayers for services provided?)

Facility Name: Midshore II Regional Solid Waste Facility

Refuse Disposal Permit #: 2005-WMF-0608

SECTION A. Waste Accepted

Table A1 – Waste Accepted

Origin	STATE →						
	COUNTY →						
MSW	Residential						
	Commercial						
	Mixed						
	MSW Ash ¹						
Other Wastes	Non-MSW Ash ¹						
	Asbestos						
	Asphalt						
	C&D ¹						
	Concrete ¹						
	Industrial						
	LCD						
	Front-end Scrap Metal						
	Back-end Scrap Metal						
	Scrap Metal						
	Scrap Tires						
	Sewage Sludge						
	Soil						
	Special Medical Waste						
	Other 1: List*						
	Amount						
	Other 2: List*						
	Amount						
	Other 3: List*						
	Amount						
	Other 4: List*						
	Amount						
	Other 5: List*						
Amount							
TOTAL		0.00	0.00	0.00	0.00	0.00	0.00
TOTAL WASTE ACCEPTED A1 ▶▶						0.00	

¹ See Section A for definitions and additional information.

* Includes materials such as, but not limited to, white goods, compost, wood waste, yard waste.

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Appendix F: Drop-Off Recycling Centers

Queen Anne's County

Centreville

- Banjo Lane (behind QA Health Dept)
- Centreville Drop-off Center, Harper Rd

Chester

- Baker's Liquor Store, Route 18
- Castle Marina (metal cans and plastic only)
- Church Hill Drop-off Center, Routes 19 & 405

Grasonville Drop-off Center, Gravel Run Rd

Glanding Drop-off Center, Glanding Rd

Stevensville

- Bay Bridge Marina
- Park & Ride (Western Auto)
- Batts Neck Drop-off Center, Batts Neck Road
- Love Point - Route 18
- Romancoke – Cove Creek Club

Sudlersville - Southern States, Route 313

Wye Mills – Chesapeake College

Other recycling centers are available in the Midshore Region of Caroline, Kent and Talbot Counties.

Recycling materials at all recycling centers are collected by the Maryland Environmental Service. Additional information on all recycling centers can be obtained through the Maryland Environmental Service.

Appendix G: Agencies and Businesses Serviced by County Recycling Pick-Up

NAME	CITY	ITEMS COLLECTED
ADVANTAGE SELF STORAGE	Chester	W, ONP, C
ALLSTATE INSURANCE	Centreville	W, PLASTIC
ANIMAL SERVICES	Queenstown	W, C
BARCLAY POST OFFICE	Barclay	ONP, C
BAY BRIDGE AIRPORT	Stevensville	W, ONP, C, PLASTIC, CANS
BAY CARPETS	Centreville	W, ONP, C, CANS, (C 2X)
BAY TIMES	Stevensville	ONP, C
BOARD OF EDUCATION	Centreville	W, ONP, C (2X)
BOZEK	Centreville	W, ONP, C, CANS
BRENT T. CARROLL, C.P.A.	Centreville	ONP, C, PLASTIC
BRILLIANT TITLE	Chester	W, C
CABOODLE	Centreville	W, ONP, C
COLDWELL BANKERS	Chester	W, ONP
CAMP PECOMETH	Centreville	C (C 2X IN SUMMER, 1X REST OF YEAR)
CAMP WRIGHT	Stevensville	C (2X IN SUMMER)
CALVARY ASBURY UNITED CHURCH	Sudlersville	W, ONP
CENTREVILLE LIBRARY	Centreville	W, ONP, C, CANS, PLASTIC (C 2X)
CENTREVILLE METHODIST CHURCH	Centreville	W, ONP
CENTREVILLE POST OFFICE	Centreville	ONP, C
CHESAPEAKE COLLEGE	Wye Mills	W, ONP, C, CANS, PLASTIC (C 2X)
CHESTER WYE ADMC	Stevensville	W, ONP
CHURCH HILL POST OFFICE	Church Hill	ONP, PLASTIC
CLUB ONE	Chester	W, ONP, C, CANS, PLASTIC
COMMUNITY PARTNERSHIPS FOR CHILDREN	Centreville	W, ONP, C
COUNTY COURT HOUSE	Centreville	W
CRUMPTON POST OFFICE	Crumpton	ONP, C, CANS, PLASTIC
DAVIS, MOORE & SHARON	Centreville	W
DELMARVA POWER	Centreville	W, C (2X)
DEPT OF AGING	Centreville	W, ONP, C, CANS, PLASTIC
DEPT OF AGING TRANSPORTATION OFFICE	Centreville	W, C
DEPT OF AGRICULTURE	Centreville	W, ONP, C
DEPT OF AGRICULTURE CO-OP EXTENSION OFFICE	Centreville	W, ONP, C, PLASTIC
DEPT. OF NATURAL RESOURCES - WYE MILLS	Wye Mills	W, ONP, C, CANS, PLASTIC
DEPT OF SOCIAL SERVICES	Centreville	W, C, CANS, PLASTIC
DEPT OF TOURISM, ECONOMIC DEVELOPMENT	Chester	W, ONP, CANS, PLASTIC
DETENTION CENTER	Centreville	C
DR. HONICK	Chester	W, ONP
EASTERN SHORE ANIMAL HOSPITAL	Chestertown	W, ONP, C, PLASTIC
EDWARDS PHARMACY	Centreville	W, C, ONP
ELECTION BOARD	Centreville	W, ONP, C
EMERGENCY OPERATIONS CENTER	Centreville	C, ONP, CANS, PLASTIC, W
ENVIRONMENTAL HEALTH	Centreville	W, ONP, C
FARM SERVICE AGENCY	Centreville	W, ONP, C
FEDERAL RESOURCES	Stevensville	CANS, PLASTIC, GLASS
FOXTOWN APARTMENTS	Sudlersville	W, ONP, C, PLASTIC, CANS
FOSTER, BRADEN & THOMPSON	Stevensville	W
FREESTATE	Centreville	W, ONP
GREGORY D. TORCHIO ARCHITECT	Centreville	W, ONP, C, PLASTIC, GLASS
GUNSTON DAY SCHOOL	Centreville	W, ONP, C, CANS, PLASTIC
H&R BLOCK	Centreville	W, ONP, C, CANS, PLASTIC

W - White Paper

ONP - Old Newspaper

C - Corrugated Cardboard

C 2X - Corrugated Cardboard collected two times per week

Appendix G

NAME	CITY	ITEMS COLLECTED
HEALTH DEPARTMENT	Centreville	W, ONP, C
HOUSING AND COMMUNITY SERVICES	Centreville	W, ONP, C
HOUSING AUTHORITY	Centreville	W, ONP, C
INTERNATIONAL MARINE INSURANCE	Grasonville	W, ONP, PLASTIC
INTER RAIL TRANSPORT	Centreville	W, ONP, C, PLASTIC
KENT MANOR INN	Stevensville	ONP, GLASS
KENT ISLAND ADULT DAY CARE	Stevensville	W, ONP, C
KENT ISLAND LIBRARY	Stevensville	ONP, C, CANS, GLASS, PLASTIC
KENT ISLAND SANITARY	Stevensville	W, ONP, C (2X)
KIEWIT	Stevensville	CANS, PLASTIC
KRAM & MCCARTHY	Chester	W, C
LAND USE, GROWTH MGT & ENVIRONMENT	Centreville	W, ONP, C
LIBERTY BUILDING	Centreville	W, ONP, C
LIQUOR LICENSE BOARD	Centreville	W
LONG & FOSTER - KI	Stevensville	W, ONP, C
MARYLAND DEPT OF AGRICULTURE	Centreville	W, C, ONP
MATAPEAKE STATE PARK	Stevensville	W, ONP, C, CANS, PLASTIC, GLASS
McCRONE	Centreville	W, ONP, C
MICHIGAN MECHANICAL	Stevensville	W, ONP, C, CANS, PLASTIC
MILTECH	Stevensville	ONP, C, GLASS, PLASTIC, CANS
MURDOCH FLORISTS	Centreville	C
NATURAL RESOURCES CONSERVATION SERVICE	Centreville	W, ONP, C
OUR DAILY THREAD	Stevensville	C, CLOTHES
PARKS & RECREATION	Centreville	W, ONP, C
PEGGY'S SEWING CENTER	Centreville	C
PENN STATION PRINTING	Centreville	W, C (2X)
PLUMBING BOARD	Centreville	W, ONP
PRICE & GANNON	Centreville	W, PLASTIC, CANS, GLASS
RECORD OBSERVER	Centreville	W, ONP, C, PLASTIC
REGISTER OF WILLS	Centreville	W, ONP
ROADS OFFICE	Centreville	W, ONP, C, CANS, PLASTIC (C 2X)
ROSENDALE REALTORS	Stevensville	W, ONP, C
SHERIFF'S DEPARTMENT	Centreville	W, ONP, C
SHIRLEY MIDDLETON TAX SERVICE	Centreville	W
SHORE DISTRIBUTORS	Grasonville	C
SHORE LUMBER	Centreville	C, W, ONP
SOIL CONSERVATION	Centreville	ONP, W, C
STATE POLICE	Centreville	W, ONP, C, PLASTIC, CANS
STATES ATTORNEY'S OFFICE	Centreville	W, C
SUDLERSVILLE POST OFFICE	Sudlersville	ONP, C
TERRAPIN GROVE SENIOR CENTER	Stevensville	W, ONP, CANS, PLASTIC
THOMAS ASSOCIATES	Stevensville	W, ONP, C, CANS, PLASTIC
THREE POINT PRODUCTS	Stevensville	W, ONP, C
THRIFT ON FIFTY	Stevensville	C
TIDEWATER PROPERTIES	Queenstown	W, ONP, C
TOWN OF CENTREVILLE	Centreville	W, ONP, C
WESTERN AUTO	Centreville	C
VAPOTHERM	Stevensville	W, ONP, CANS, PLASTIC, GLASS
VIDEO MOUNT PRODUCTS	Stevensville	C
WYE RIVER KENNELS	Queenstown	CANS, PLASTIC, GLASS

W - White Paper
 ONP - Old Newspaper
 C - Corrugated Cardboard
 C 2X - Corrugated Cardboard collected two times per week

Appendix H: Current Landfill Tipping Fee Schedule at MRL

Hauler agrees to pay a tipping fee of \$60.00 per ton for all acceptable wastes except for segregated yard waste/brush for which the Hauler agrees to pay a tipping fee of \$30.00 per ton. There will be a minimum fee of \$7.50 per transaction for up to 240 lbs. of waste. In addition to the tipping fee, a series of tire disposal surcharges have been set for different size tires. The Hauler agrees to pay the following tire surcharges:

Passenger Tire (tire size \leq R 15): \$3.00/tire

Light Truck Tire (tire size \geq R 15): \$4.25/tire

Heavy Truck Tire (tire size 9:00 and larger): \$13.00/tire

Off-road Tires: \$400.00/ton

Surcharges shall be doubled if tires are brought to the facility with rims or other attachments, covered in dirt/debris, or otherwise contaminated.



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Appendix I: MRSWF CY2012 Commodities (in Tons) MRA Waste & Non-MRA Waste; Rates

FORM B- County Recycling Accounting Form								
Table B1 - MRA Materials Recycled *					TABLE B1b - Other MRA Materials *			
Calendar Year 2012		Queen Anne's County						
		Subtotal		QA Total	Subtotal			QA Total
Category	MRA Recyclables	QA Residential (tons)	QA Commercial (tons)	MRA Tons Recycled	Other MRA: Other	QA Residential (tons)	QA Commercial (tons)	MRA Tons Recycled
Commingled Containers	Commingled Containers	-	-	-	Bakery Waste	-	-	-
Compost/Mulch (Yard)	Brush and Branches	-	1,600.00	1,600.00	Flourescent Bulbs	-	-	-
	Grass	-	-	-	Toner Cartridges	-	-	-
Landscaping Only	Leaves	-	-	-	Food Processing By-Products	-	38,677.48	38,677.48
Landclearing in Table B2	Mixed Yard Waste	-	411.16	411.16		-	-	-
Compost/Mulch (Other)	Food Waste	-	35.16	35.16		-	-	-
	MSW Compost	-	-	-		-	-	-
	Wood Materials	-	-	-		-	-	-
	Other	-	-	-	Total Other MRA (Tons)	-	38,677.48	38,677.48
Glass	Brown Glass	2.99	0.03	3.01				
	Clear Glass	3.96	0.01	3.97				
	Green Glass	4.25	0.00	4.26				
	Mixed Glass	57.69	-	57.69				
	Other	-	-	-				
Metals	Aluminum Cans	3.21	105.60	108.81				
	Front End Scrap	427.34	1.30	428.64				
	Lead Acid Batteries	-	91.64	91.64				
	Mixed Cans (Al, Sn, Steel)	24.09	31.73	55.82				
	Tin (Sn)/Steel Cans	-	-	-				
	White Goods	-	2,008.00	2,008.00				
	Other	-	0.20	0.20				
Paper	Magazines	-	-	-				
	Mixed Paper	214.43	115.01	329.43				
	Newspaper	-	409.09	409.09				
	Office/Computer Paper	19.52	808.21	827.73				
	Old Corrugated Cardboard	635.39	702.94	1,338.33				
	Other	-	-	-				
Plastic	Mixed Plastic	39.72	9.76	49.48				
	Plastic Code # Film	67.34	7.14	74.48				
	Plastic Code # 1,2,3	-	-	-				
	Other	-	-	-				
Other	Animal Protein/Solid Fat	-	155.81	155.81				
	Electronics	11.90	0.11	12.01				
	MSW-to-Energy Ash	-	-	-				
	Pallets	-	50.14	50.14				
	Textiles	27.90	-	27.90				
	Tires (Recycled)	65.22	55.41	120.63				
	Tires (Retread)	-	-	-				
	Tires (Cement Kiln)	-	-	-				
	Other: See Table B1b	-	38,677.48	38,677.48				
Total MRA (Tons)		1,604.93	45,275.93	46,880.86				
FYI: Avoided Landfill Tipping Costs @ \$58 / ton		\$93,086	\$2,626,004	\$2,719,090				

FORM B - TABLE B2 Non-MRA Materials Recycled*			
Material	QA Residential (tons)	QA Commercial (tons)	QA Non-MRA Tons
Antifreeze (9.8 lbs/Gal)	3.43	2.44	5.87
Asphalt	-	20,000.00	20,000.00
C & D Debris	-	1,470.00	1,470.00
Coal Ash (Fly Ash, Pozzolan)	-	-	-
Concrete/Bricks	-	5,357.00	5,357.00
Landclearing Debris (stumps)	-	2,317.00	2,317.00
Scrap Automobiles	-	1,550.00	1,550.00
Scrap Metal	0.03	8,820.54	8,820.57
Sewage Sludge	-	-	-
Soils	-	1,220.89	1,220.89
Waste Oil (7 lbs./Gal)	67.79	84.66	152.45
Other: Food Waste - Liquid	-	-	-
Other: Tires WTE	-	-	-
Other: Textiles for reuse	27.69	-	27.69
Other: Solvent	-	10.81	10.81
Other: Pallets	-	-	-
Other: Oil Filters	-	-	-
Total Non-MRA Recycling	98.94	40,833.34	40,932.28
FYI: Avoided Landfill Tipping Costs @ \$58 / ton	\$5,738	\$2,368,334	\$2,374,072
FYI: Total Avoided Landfill Tipping Costs @ \$58 / ton	\$98,825	\$4,994,337	\$5,093,162

Calendar 2012 Maryland Waste Diversion Rates & Tonnages

County	Total MRA (tons)*	MRA Recyclables (tons)	MRA Recycling Rate**	Source Reduction Credit^	Source Reduction (tons)***	Total Tonnage Diverted****	MRA Waste Diversion Rate*****	Non-MRA Recyclables (tons)	Non-MRA Waste (tons)	Total Waste (tons)^^	Overall Waste Diversion Rate^^^
Allegany	95,604.80	29,202.57	30.55%	3%	2,956.85	32,159.42	33.55%	501,783.35	12,751.62	610,139.77	90.03%
Anne Arundel	653,829.25	299,786.09	45.85%	4%	27,242.89	327,028.98	49.85%	196,921.57	276,195.71	1,126,946.53	48.08%
Baltimore City	747,551.33	221,658.16	29.65%	0%	0.00	221,658.16	29.65%	330,598.02	431,868.57	1,510,017.92	38.82%
Baltimore County	1,014,620.74	421,287.35	41.52%	5%	53,401.09	474,688.44	46.52%	497,722.12	444,203.12	1,956,545.98	51.97%
Calvert	67,763.44	30,564.44	45.10%	0%	0.00	30,564.44	45.10%	5,336.61	25,720.29	98,819.34	36.33%
Carroll	165,633.00	61,055.36	36.86%	5%	8,717.53	69,772.89	41.86%	544,071.35	19,355.21	729,059.56	88.00%
Cecil	102,326.83	38,009.31	37.15%	4%	4,263.62	42,272.93	41.15%	30,185.75	22,073.00	154,585.58	48.11%
Charles	152,631.91	74,965.81	49.12%	4%	6,359.66	81,325.47	53.12%	502,498.66	35,292.10	690,422.67	87.64%
Dorchester	38,996.39	8,275.39	21.22%	0%	0.00	8,275.39	21.22%	11,300.32	16,825.74	67,122.45	29.16%
Frederick	267,482.30	124,953.83	46.71%	5%	14,078.02	139,031.85	51.71%	35,758.21	55,033.50	358,274.01	49.86%
Garrett	42,115.20	19,724.04	46.83%	1%	425.41	20,149.45	47.83%	2,396.68	7,237.87	51,749.75	43.75%
Harford	273,892.34	150,076.26	54.79%	5%	14,415.39	164,491.65	59.79%	108,780.00	35,573.20	418,250.54	66.89%
Howard	482,331.93	225,681.63	46.79%	4%	20,097.16	245,778.79	50.79%	48,569.40	100,872.56	631,773.89	47.41%
Mid-Shore	206,466.48	108,772.60	52.68%	0%	0.00	108,772.60	52.68%	63,655.13	24,747.20	294,868.81	58.48%
Montgomery	1,080,343.82	592,148.60	54.81%	5%	56,860.20	649,008.80	59.81%	106,918.39	221,175.86	1,408,438.07	54.63%
Prince George's	683,067.76	378,660.76	55.44%	4%	28,461.16	407,121.92	59.44%	356,587.52	313,322.16	1,352,977.44	58.34%
Somerset	21,642.51	3,693.26	17.06%	0%	0.00	3,693.26	17.06%	8,390.87	6,809.85	36,843.23	32.80%
St. Mary's	77,557.76	26,973.50	34.78%	4%	3,231.57	30,205.07	38.78%	36,008.47	21,193.97	134,760.20	50.74%
Washington	140,215.03	77,276.03	55.11%	0%	0.00	77,276.03	55.11%	53,880.68	23,128.00	217,223.71	60.38%
Wicomico	145,751.96	57,166.96	39.22%	0%	0.00	57,166.96	39.22%	12,196.45	6,934.11	164,882.52	42.07%
Worcester	99,900.00	29,271.22	29.30%	0%	0.00	29,271.22	29.30%	31,086.00	26,588.04	157,574.04	38.30%
Roads Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	173,459.00	N/A	173,459.00	N/A
MARYLAND TOTALS	6,559,724.78	2,979,203.17	45.42%	3.54%	240,510.54	3,219,713.71	48.95%	3,658,103.55	2,126,905.68	12,344,735.01	57.30%
EPA	5,965,076.97	2,407,712.36	40.36%	NA	NA	2,407,712.36	40.36%	4,229,594.36	2,150,063.68	12,344,735.01	53.77%

MRA + Non MRA Recycling Rate
 -53.76629563
 Decrease Increase from previous year

* Total MRA = MRA Recyclables + MRA Waste - MSW Ash Recycled - Backend Scrap Metal Recycled
 ** MRA Recycling Rate = MRA Recyclables (tons) ÷ Total MRA (tons)
 *** Source Reduction (tons) = (Total MRA (tons) + (1 - Source Reduction Credit)) · Total MRA (tons)
 **** Total Tonnage Diverted = Source Reduction (tons) + MRA Recyclables (tons)
 ***** MRA Waste Diversion Rate = MRA Recycling Rate + Source Reduction Credit
 ^ Source Reduction Credit for Maryland = Source Reduction (tons) ÷ (Total MRA (tons) + Source Reduction (tons))
 ^^ Total Waste (tons) = Total MRA (tons) + Non-MRA Recyclables (tons) + Non-MRA Waste (tons)
 ^^ Overall Waste Diversion Rate = ((MRA Recyclables (tons) + Non-MRA Recyclables (tons)) ÷ Total Waste (tons)) + Source Reduction Credit

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Appendix K: CY2013 MDE Reports – R.B. Baker & Sons, Inc. Rubble Landfill

MARYLAND DEPARTMENT OF THE ENVIRONMENT
 Land Management Administration • Technical Services and Operations Program
 1800 Washington Boulevard • Baltimore MD 21230-1719
 410-537-3314 • 1-800-633-6101 x3314 • www.mde.state.md.us

Solid Waste Tonnage Report for Calendar Year 2012

Facility Name: R. B. BAKER & SONS, INC.

Refuse Disposal Permit #: 2006 - WRF - 0622

Name of Permit Holder: R. B. BAKER & SONS, INC.

Facility Address: 501 4H PARK RD., P.O. Box 2
Street

Facility Address: QUEENSTOWN, MD. 21658
City State Zip

County: QUEEN ANNES

Facility Telephone No.: 410-827-8831 Facility Fax No.: 410-827-9504

Contact Name: TED BAKER

Contact Title: PRES.

Contact Address: 501 4H PARK RD., P.O. Box 2
Street

Contact Address: QUEENSTOWN, MD 21658
City State Zip

Contact Email: mjbaker@yahoo.com

Contact Telephone No.: 410-827-8831 Contact Fax No.: 410-827-9504

For questions on how to complete this form, please call Mr. Tariq Masood at 410-537-3326.

R. B. BAKER & SONS, INC.
 P. O. BOX 2
 QUEENSTOWN MD 21658
 2006-WRF-0622

Form Number: MDE/WAS/Gen.001
 Date: December 31, 2012
 TTY Users: 800-735 2250

4

Facility Name: R. B. BAKER & SONS, INC. Refuse Disposal Permit #: 2006-WRF-0622

Solid Waste Tonnage Report – 2012

SECTION A. Waste Accepted

Table A1 – Waste Accepted

Supplemental page(s) attached? Yes No

Origin	STATE →	MD	MD	MD	MD	MD	MD	TOTAL
	COUNTY →	ANNE ARUNDEL	CAROLINE	DORCHESTER	KENT	QUEEN ANNE	TALBOT	
MSW	Residential							
	Commercial							
	Mixed							
	MSW Ash ¹							
Other Waste	Non-MSW Ash ¹							
	Asbestos							
	Asphalt							
	C&D ¹	2638	139	48	2855	9506	967	16,153
	Concrete ¹							
	Industrial							
	LCD							
	Scrap Metal ¹ :							
	Front-end							
	Back-end							
	Scrap							
	Scrap Tires							
	Sewage Sludge							
	Soil							
	Special Medical Waste							
	Other 1: List ¹							
	Amount							
Other 2: List ¹								
Amount								
Other 3: List ¹								
Amount								
TOTAL							↓↓↓	
TOTAL WASTE ACCEPTED								16,153

¹ See Section A for definitions and additional information.

* Includes materials such as, but not limited to, white goods, compost, wood waste, yard waste, food waste, electronics, pallets, and textiles. See Section A for definitions and additional information.

Facility Name: R. B. BAKER & SONS, Inc. Refuse Disposal Permit #: 2006-WRF-0622

Solid Waste Tonnage Report – 2012

SECTION B. Waste-to-Energy Facilities/Incinerators ONLY

1. Tonnage of MSW ash generated from solid waste accepted at facility: _____
2. Tonnage of Non-MSW ash generated from solid waste accepted at facility: _____
3. Tonnage of by-pass generated from solid waste accepted at facility: _____

SECTION C. Total Amount of Waste Managed at Facility in 2012

TOTAL IN TABLE A1	16,153	A1
MSW ASH GENERATED (WTE ONLY)		B1
NON-MSW ASH GENERATED (WTE ONLY)		B2
BY-PASS GENERATED (WTE ONLY)		B3
Stored Solid Waste from Previous Year *		C1
GRAND TOTAL (A1+B1+B2+C1) ^	16153	C2



* Means the solid waste that was temporarily stockpiled at the site in the previous year but wasn't managed until the current year. See Section C for instructions and additional information.

^ The total reported in C2 MUST equal the total tons reported in Section D (See Section E).

SECTION D. Methods of Solid Waste Management

Table D1 – On-Site Management (In Tons)

	Landfilled	Incinerated	Projects at Landfills ^	Stored	Reused (RU) or Recycled (RC) or Composted (CM)/ Mulched			TOTAL
					RU	RC	CM	
MSW								
MSW Ash ¹								
Non-MSW Ash ¹								
Asbestos								

Form Number: MDE/WAS/Gen.001
 Date: December 31, 2012
 TTY Users: 800-735-2258

Facility Name: R. B. BAKER SONS, INC. Refuse Disposal Permit #: 2.006-WRF-0622

Solid Waste Tonnage Report – 2012

	Landfilled	Incinerated	Projects at Landfills ^A	Stored	Reused (RU) or Recycled (RC) or Composted (CM)/ Mulched			TOTAL
						RC		
						CM		
Asphalt						RU		
						RC		
						CM		
C&D ¹	13,403					RU		
						RC		15,903
					2,500	CM		
Concrete ¹						RU		
						RC		
						CM		
Industrial						RU		
						RC		
						CM		
LCD						RU		
						RC		
						CM		
Scrap Metal ¹ :								
Front-end						RU		
						RC		
						CM		
Back-end						RU		
						RC		
						CM		
Scrap						RU		
						RC		
						CM		
Scrap Tires						RU		
						RC		
						CM		
Sewage Sludge						RU		
						RC		

REPORT on PAGE 8

Form Number: MDE/WAS/Gen.001
 Date: December 31, 2012
 TTY Users: 800-735-2258

Facility Name: R. B. BAKER & SONS, INC. Refuse Disposal Permit #: 2006-WRF-0622

Solid Waste Tonnage Report – 2012

	Landfilled	Incinerated	Projects at Landfills [^]	Stored	Reused (RU) or Recycled (RC) or Composted (CM)/ Mulched	TOTAL
					CM	
Soil					RU RC CM	
Special Medical Waste					RU RC CM	
Stored Waste (C1)					RU RC 2500 CM	2500
Other 1 *: UNADULTERATED WOOD					RU RC CM	
Other 2 *:					RU RC CM	
Other 3 *:					RU RC CM	
TOTAL TONS					RU RC CM	15,903

[^] Means the use of solid waste or other materials for projects at landfills (e.g.: daily cover, road construction, etc.).

¹ See Section D for definitions and additional information.

* Includes materials such as, but not limited to, white goods, compost, wood waste, yard waste, food waste, electronics, pallets, and textiles. See Section D for definitions and additional information.

Table D2 – Off-Site Management (In Tons)

State	County	Facility	Type of Waste	Tons	Recycled or Disposed
MD	BALTIMORE CITY	BALT. SCRAP CORP.	STEEL	200	RECYCLED
MD	ANNE ARUNDEL	INTERMATERIALS	NON FERROUS METALS	15	RECYCLED
PA	WESTMORLAND	ALUMISOURCE CORP.	ALUMINUM	35	RECYCLED

Form Number: MDF/WAS/Gen.001
 Date: December 31, 2012
 TTY Users: 800-735-2258

Facility Name: R. B. BAKER & SONS, INC. Refuse Disposal Permit #: 2006-WRF-0622

Solid Waste Tonnage Report – 2012

State	County	Facility	Type of Waste	Tons	Recycled or Disposed
TOTAL TRANSPORTED				250	D2

SECTION E. Quality Control (QC) Check

Total Tons of Solid Waste Managed at Facility in Current Year	16,153	C2
Total Tons in Table D1	15,903	D1
Total Tons in Table D2	250	D2
Total (D1 + D2)	16,153	E1
Difference (C2 – E1) *	0	E2

* Difference MUST be 0. C2 MUST equal E1.

SECTION F. Additional Information to be Submitted by ALL Permitted Facilities

F1. How is/are the category(ies) of incoming solid waste determined?
VISUAL INSPECTION

F2. How is the origin or source of incoming solid waste for each waste category determined?
INFORMATION FROM DRIVER

F3. If applicable, what is the conversion factor used to convert cubic yards (yd³) to tons?
N/A

F4. What is the total quantity in tons of solid waste and other materials accepted per month?

January	February	March	April	May	June
1148	1182	1666	1764	1409	1489
July	August	September	October	November	December
1644	1243	1181	1261	1220	946

Form Number: MDE/WAS/Gen.001
 Date: December 31, 2012
 TTY Users: 800-735-2258

Facility Name: R. B. BAKER + SONS, INC. Refuse Disposal Permit #: 2006-WRF-0622

Solid Waste Tonnage Report -- 2012

TOTAL:	Note: This total <u>MUST</u> equal the amount reported in A1.
Include A Copy Of The Current Tip Fee And Other Charges For Your Facility With This Report	

SECTION G. Additional Information to be Submitted by Permitted LANDFILL Facilities

	Cubic Yards	Tons
G1. Total permitted landfill capacity.	820,000	435,000
G2. Total amount of solid waste landfilled for year 2012.	27,218	13,403
G3. Total amount of solid waste landfilled to date.	569,972	331,402
G4. Total remaining permitted landfill capacity.	250,028	103,598
	Percentage	
G5. Percentage of total permitted landfill capacity used for 2012.	3%	
	Year	
G6. Projected calendar year when landfill will reach capacity.	2020	
	Number	
G7. Number of permitted cells in landfill (as identified in approved plans).	1	
G8. A topographic map must be generated by a survey performed within the last three months of the reporting period. The topographic map is to accurately describe the permitted landfill area. The map is to be signed and sealed by a professional land surveyor; be drawn to a scale between 1" = 40' and 1" = 200', as appropriate; and at a minimum, contain the following information: (a) The total permitted cell acreage; (b) The total amount of solid waste landfilled to date; and (c) The total remaining permitted landfill capacity.		

SECTION H. Certification

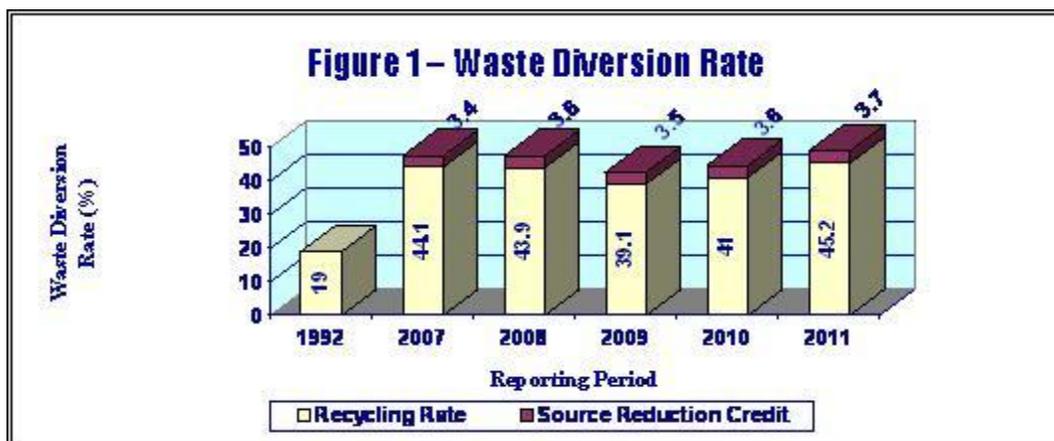
This is to certify that, to the best of my knowledge, the information contained in this report and any attached documents are true, accurate, and complete.		
 Signature	<u>TED BAKER, PRES. (410) 827-8831</u> Name, Title, & Telephone No. (Print or Type)	<u>2-22-13</u> Date

Appendix L: Maryland Source Reduction Diversion Rate Summary

Source: [MDE Website](http://www.mde.state.md.us)

<http://www.mde.state.md.us/programs/Land/RecyclingandOperationsprogram/StateCountyandCityContactInfo/Pages/programs/landprograms/recycling/local/recyclingrates.aspx>

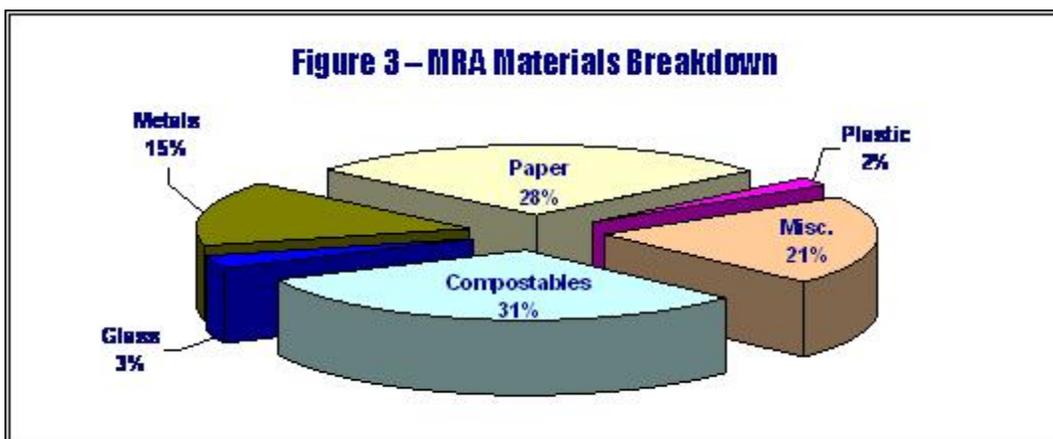
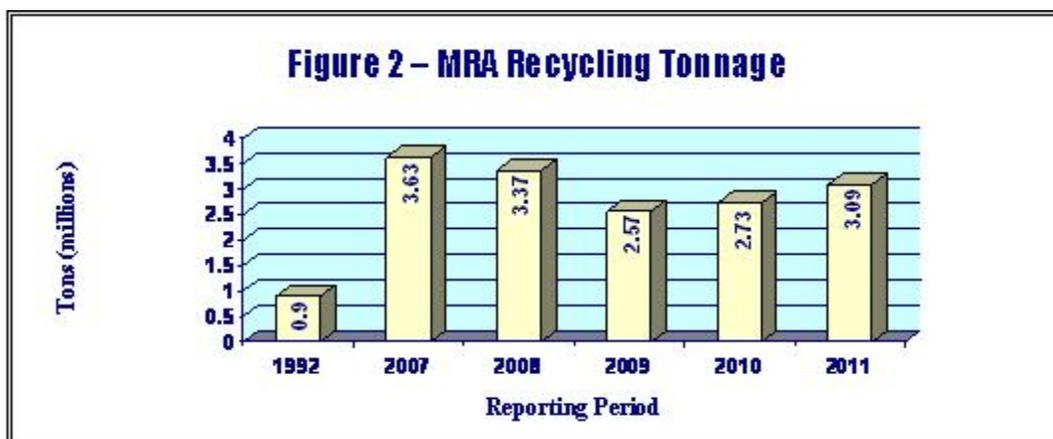
The recycling rate plus the source reduction (SR) credit make up the waste diversion rate. Through the efforts of its citizens, businesses and government agencies, Maryland achieved a statewide waste diversion rate of 48.9% in calendar year (CY) 2011. The 48.9% waste diversion rate was composed of a 45.2% MRA recycling rate and a 3.7% SR credit. This exceeds the requirements of the MRA and the 40% waste diversion goal targeted for 2005. Figure 1 provides a historical breakdown of Maryland's waste diversion rate.



Maryland's 45.2% Recycling Rate

In CY 2011, Maryland residents and businesses recycled 45.2% (MRA recycling tonnage ÷ (MRA recycling tonnage + MRA waste disposed)) of the municipal solid waste generated. To encourage more recycling, states across the country are seeking new ways (e.g., Single Stream Recycling, Pay-As-You-Throw Programs, etc.) to ensure that recycling continues to gain in popularity as a waste management option. Many states, including Maryland, are investigating new commodities to bring into the recycling stream, while continuing to promote the benefits of recycling.

Figure 2 summarizes the recycling tonnages since 1992 and Figure 3 categorizes the total MRA tons recycled by material in CY 2011. Compostables, and paper materials constituted the largest portion of materials recycled (miscellaneous materials are comprised of multiple materials, the largest being municipal incinerator ash at over 62% of the total miscellaneous materials).



MDE encourages the recycling of all materials because of the environmental and economic benefits that recycling provides. The County Recyclables by Commodity in Tons for Calendar Year 2011 details recycling and waste diversion rates for each of Maryland's jurisdictions. Business and local governments continue to seek recycling opportunities above and beyond those that apply toward the MRA rate. In fact, over 3.8 million tons of other Non-MRA materials were reported as being recycled in 2011. The Recycling of Non-MRA Materials in Tons table offers a breakdown by category of the amount of Non-MRA materials reported recycled in 2011. For a complete overview on how solid waste is managed in Maryland, please refer to the annual Solid Waste Management and Diversion report.

Maryland's 3.7% Source Reduction Credit

In 2011, fifteen of Maryland's jurisdictions were able to add from 1% to 5% to their waste diversion rate by emphasizing SR activities as a waste reduction strategy. They accomplished this utilizing Internet resources, demonstration sites (i.e., backyard food waste and yard waste composting), and publications on reuse practices and yard waste reduction. A complete list of SR activities and a breakdown of Maryland SR activities in calendar year 2011 is available in the "Source Reduction" section.

Non-profit groups are partnering with government to increase awareness of source reduction and reuse opportunities for materials such as linens, pet supplies, medical equipment, clothing and computers. The partnering provides businesses information on how to improve their bottom line through recycling and SR. As counties learn from their successful colleagues, even more SR programs are expected.

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Appendix N: Public Hearing Record and Comments

No Comments Received

PUBLIC NOTICE

APG Media of Chesapeake
P.O. Box 600
29088 Airpark Drive
Easton, MD 21601

05/11/15

Phone:(410) 770-4000 Fax:(877) 600-1230

AFFIDAVIT OF PUBLICATION

STATE OF : MARYLAND

COUNTY OF: QUEEN ANNES

Personally appeared 05/08/15 before me, Rocky Brooks of the Record Observer, APG Media of Chesapeake, LLC, a weekly newspaper printed and published in the City of Centreville, County of Queen Annes County, State of Maryland, who, being duly sworn states that an advertisement of 2015-2025 Solid Waste Plan was published in the:

Record-Observer 04/24/15
Record-Observer 05/01/15
Record-Observer 05/08/15
Bay Times 04/29/15
Bay Times 05/06/15
US-ChesapeakeInternet 04/24/15
US-ChesapeakeInternet 04/29/15
US-ChesapeakeInternet 05/01/15
US-ChesapeakeInternet 05/06/15
US-ChesapeakeInternet 05/08/15



David Fike
President & Publisher

**PUBLIC NOTICE
COMPREHENSIVE
SOLID WASTE PLAN 2015-2025**

Notice is hereby given that the County Commissioners of Queen Anne's County will hold a public hearing at 9:20 am on Tuesday, May 12, 2015 in the Commissioners Hearing Room located in the Liberty Building, 107 North Liberty Street, Centreville, Maryland 21617. The purpose of the hearing is to review the draft Comprehensive Solid Waste Management Plan. This 10-year plan is required pursuant to the Code of Maryland Regulations Title 26, Subtitle 03, Chapter 03 entitled "Development of County Comprehensive Solid Waste Management Plans."

The hearing site is accessible to individuals with disabilities. Sign language interpreters and assistive listening systems will be available for individuals with a hearing impairment. Please contact Margie Houck at (410) 758-4098 or TDD (410) 758-2126 seven (7) days prior to the hearing date if the above assistance is needed for the meeting.

Persons who wish to comment on the proposed Comprehensive Solid Waste Management Plan may do so at the hearing. Speakers will be limited to three (3) minutes each, but written testimony of any length may be submitted before the hearing date to the Director of the Department of Public Works, 312 Safety Dr, Centreville, MD 21617. Written comments are due by 4:30 pm on Monday, May 11, 2015.

The proposed Comprehensive Solid Waste Management Plan is available for public review by visiting www.qac.org. Copies of the draft plan are also available at the Department of Public Works, 312 Safety Drive, Centreville, MD 21617 for review or purchase.

RO 4/24/5/1/8 BT 4/29/5/6 (2515973) 2550631

CITIZEN SIGN-IN SHEET

No Sign-ins for Public Comment



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