



Solid Waste Management Plan



LOUDOUN COUNTY
SOLID WASTE MANAGEMENT PLANNING DISTRICT

For the County of Loudoun and the incorporated Towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill

Approved by DEQ on APRIL 21, 2004

ACKNOWLEDGEMENTS
LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

LOUDOUN COUNTY
2003 AD HOC SOLID WASTE MANAGEMENT COMMITTEE

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& Chair, Ad Hoc Solid Waste Management Committee

Mr. Jim Burton, Supervisor, Former Mercer District

Ms. Eleanor Towe, Supervisor, Blue Ridge District

The Honorable Keith Reasoner, Mayor of Hamilton

The Honorable Steve Morgart, Mayor of Hillsboro

The Honorable Elaine Walker, Mayor of Lovettsville

Mr. Charles Hartgrove, Town Administrator of Middleburg

Mr. Kelly Yost, Town Administrator of Round Hill

Mr. Martin Kloeden, Assistant to the Town Manager of Purcellville

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ACKNOWLEDGEMENTS
LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

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EXECUTIVE SUMMARY

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

The Charge

In July of 2002, I agreed to serve as Chair of the Ad Hoc Solid Waste Management Planning Committee (the Committee). The Committee's charge from the Board of Supervisors was to conduct a review of the Solid Waste Management Plan (SWMP) and to complete any and all revisions in time for a final approval by July 2003.

I soon realized that reviewing and revising the Solid Waste Management Plan was a multifaceted challenge. Solid waste management has technical, financial, environmental, legal, regulatory, political, policy, and marketplace dimensions. I also realized that, as a changing and growing County, the plan had to answer to many groups and individuals or stakeholders. These stakeholders included individual citizens, major solid waste customers and contract holders (Towns and HOA's), environmental advocacy groups, and the solid waste industry service providers who collect, transport, recycle and dispose of the solid waste generated in the nation's second fastest growing County. Participation from these stakeholders was very important in conducting a meaningful process and in creating a workable plan.

Satisfying Many Stakeholders

First of all, the plan had to meet the State regulations for solid waste management planning (9 VAC 20-130-10 *et seq.*). The regulations state that "every city, county, and town in the Commonwealth--singly or in conjunction with other jurisdictions as a planning district--must submit a completely revised solid waste management plan between July 1, 2003, and July 1, 2004."

Second, the plan had to address the solid waste management needs of the entire Loudoun County Solid Waste Management Planning District (LCSWMPD). The District includes the Towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill, as well as the unincorporated portions of the County. In addition to my Board colleagues, Supervisors Burton and Towe, I asked each Town to name an official representative to the Committee. I believe that I speak for each Committee member when I say that the cooperation between the County and the Towns has been most productive and gratifying in working together on this plan. It really WAS work and the Committee members were diligent in their attendance and in working through lengthy meetings full of complex discussions and decisions.

Finally, it was clear to me that the plan had to be developed through a process of collaboration with all the affected parties. An open and deliberative approach to the plan's development and review is not only required by State regulation, but has helped to ensure that the ideas and concerns of the varying individuals and constituent groups are served by the plan.

EXECUTIVE SUMMARY

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

The Process

Prior to the first meeting, I sent background information to all members of the Board of Supervisors and to the Town representatives. The background information included the County's Solid Waste Ordinances, summary reports on the activities and recommendations from previous solid waste citizens' committees, State regulations and requirements governing solid waste management planning, and the District's 1995 Solid Waste Management Plan.

I also sent letters of invitation and announcement of the planning process to approximately 150 organizations and individuals. The invitations went to permitted solid waste collectors, solid waste management facility operators, Large Homeowners' Associations (HOAs) and residential managers, leaders of Loudoun environmental groups, and respondents to the solid waste survey of businesses that had indicated an interest in the planning process. I encouraged these parties to attend meetings of the Ad Hoc SWMP Committee and advised them that more formal public input opportunities would be available.

The Committee met eight times between September 2002 and February 2003 with advance meeting notices placed on the public calendar; each meeting was open to the public for attendance. Copies of meeting packets and presentation materials were provided to the Committee in advance. The materials were also available at each meeting and available upon request. Members of the public who were in attendance often addressed the Committee to ask questions, provide information, or make comment. Each meeting had an agenda, a meeting summary from the previous meeting, records of straw votes from the previous meeting, and staff responses to requests for information or to the Committee's direction for action. In addition to meeting discussions, the Committee also received letters from interested parties and solid waste industry representatives. Copies of all letters and responses were provided to the Committee.

The first two meetings involved staff presentations on background information. By the second meeting and in several subsequent meetings, the Committee was considering a series of issues and options and began taking straw votes on issues regarding the District's solid waste management system. The votes on issues and options occurred through the October meetings with final resolution of outstanding issues decided in November. The Committee's decisions formed a series of Findings and Recommendations that were the subject of the January public input session and that ultimately became Chapter 5 of the plan.

Community Comments

The Committee responded to letters from members of the solid waste industry and initiated discussion on concerns for a lack of recycling infrastructure in the County, business interest in expanding into recycling operations, and a request to lower the tipping fees at the LCSWMPF to foster competition, especially for independent solid waste collectors who do not have a facility in the County.

EXECUTIVE SUMMARY

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

The Committee's findings reflect these discussions and recommend a public-private partnership to site, construct, and operate a recycling transfer station at the Loudoun County Landfill within a prescribed set of parameters. The Committee also spent considerable time on a particular company's request to lower the tipping fees at the LCSWMF to foster competition. This request to consider relief to small independent solid waste haulers led to the Committee's request for more information. The request also provided guidance to staff that two objectives should be considered in reviewing the tipping fees – conservation of landfill capacity and a more revenue neutral operation that would cover operational and perhaps capital costs.

The County's solid waste consultant completed a preliminary study describing four scenarios, each with a goal of capturing increased waste stream percentages and on a given pricing structure. Each scenario also provided estimates of revenue that would be generated and the projected amount of landfill capacity that would be consumed. The Committee's findings include a recommendation that would adjust tipping fees at the Landfill with the dual goals of conserving capacity and revenue neutrality.

A public input session initially scheduled for December was postponed until January due to weather conditions. I sent 247 invitations to the growing list of interested parties. The list included the Board, Town Councils and Mayors, the largest HOA's and property management companies, environmental and other interest groups, individuals or groups who asked to be included on the outreach list, and solid waste industry representatives from the County's regulated solid waste community of permitted solid waste collectors and facility operators.

McCaffery Associates conducted this session using the small group networking process to allow key citizens, government and industry representatives to learn of the Plan's key elements, to react to the Committee's proposals, and to propose additions, deletions or changes to the Plan before it was finalized. Staff made brief presentations on the topics of collection, disposal, recycling, environmental protection, and policy, planning and public information, followed by a small group discussion of the Committee's recommendations for activities or policies on each respective topic.

The Committee had an additional meeting to consider the comments from the public input session. At its February 12, 2003 meeting, the Committee decided to send the Draft SWMP to the Board of Supervisors, recommending a Public Hearing and consideration by the Board of Supervisors and each member Town.

Major Plan Elements

The SWMP's major elements are:

- ◆ Introduction and Goals for the Plan (Chapter 1)
- ◆ Description of the Types and Quantities of Waste Generated in the District (Chapter 2)

EXECUTIVE SUMMARY

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

- ◆ Description of the District's Solid Waste Management System including collection, transportation, transfer and processing facilities, disposal facilities and analyses of the capacity of these components to sustain service; a description of roles of the Towns, the County and the private sector solid waste industry in solid waste services; recycling rates and how to sustain and improve recycling; and issues and service gaps in the District's solid waste management system (Chapter 3).
- ◆ Solid Waste Hierarchy of Waste Reduction, Reuse, Recycling, Waste-to-Energy, and Landfilling (Chapter 4)
- ◆ Committee Findings (Chapter 5)
- ◆ Objectives and Ways to Implement the Plan Objectives (Chapters 6 and 7)
- ◆ Current and Future Funding for the Solid Waste Management Plan Objectives (Chapter 8); and
- ◆ Description of public participation in the Plan's formation (Chapter 9).

Major Committee Findings

Solid waste planning deficiencies:

- Regional planning agencies (MWCOC and/or NVPA) should conduct a study of construction and demolition waste to determine the quantity generated, the waste composition, the present disposition of the waste, and the capacity of the region to manage this waste for the next 20 years.
- The District should proactively plan and prepare for waste management services in natural and manmade disasters. Debris waste management permits and a protocol for provision of services, and reciprocal support agreements with other jurisdictions are key provisions of this effort.
- The District members will routinely review the provisions of the Solid Waste Management Plan and ensure that the solid waste management system is functioning as envisioned. The District members have committed to a formal biannual process that will assess the validity of the plan's assumptions on waste generation, facility capacity and external factors, and identify any revisions to the plan that may be appropriate.

The Committee recommends that the District's current reliance on private sector provision of solid waste collection services continue. Minimum service standards continue to be set by the Towns through contractual terms, and by the County through regulations.

Solid Waste Management Facilities:

- Facility capacity to process vegetative waste and construction and demolition waste is adequate to address all District needs during the 20 year planning period. No increases beyond those identified in the plan are needed or proposed.
- Facility capacity to process municipal solid waste is adequate to address the District's needs through the next 10 years. This finding will be closely monitored in the biennial review.

EXECUTIVE SUMMARY

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

- The Committee recommended that the Board of Supervisors direct the County Administrator to develop and implement a plan that balances revenue neutrality with reasonable conservation of disposal capacity at the County's Solid Waste Management Facility.
- Lower tipping fees at the County facility respond to multiple private sector requests to foster competition in the collection segment of the industry.

Increase recycling and material reuse levels in the District to ensure compliance with State recycling mandates:

- Address the most critical deficit in rural recycling opportunities by immediately funding, constructing, and operating a Recycling Dropoff Center (DOC) in the Purcellville area.
- Provide DOCs as a routine part of capital facilities planning for every regional government facility.
- Pursue a private/public partnership to construct and operate a recycling depot at the County Solid Waste Management Facility to reduce or eliminate financial barriers to effective recycling currently faced by the providers of collection services.
- Rekindle the generic Recycling benefits message of the 1970s.
- Work to establish a waste exchange program that allows reuse of materials instead of disposal.

Environmental Protection initiatives:

- Increase the opportunity for Loudoun residents to dispose of household hazardous waste (HHW) by increasing the number of HHW collection events.
- Increase the opportunity for Loudoun residents to dispose of waste oil, antifreeze, and other special wastes by siting, construction, and operation of special waste collection centers in the eastern and western portions of the County.
- Increase the County regulatory oversight over processing and disposal of waste dirt, and burning of solid waste.

Implementation

The plan calls for scheduled annual reporting to the District and biennial review by the District. The annual report from Solid Waste Management Staff will keep District members apprised of the annual status of solid waste. The routine review of the District's solid waste management system every two years creates a system of accountability to determine if the system is working as anticipated or whether emerging conditions warrant a change. This feature of this Plan helps to guarantee the plan's viability over time by establishing an alert mechanism to signal a call for action.

EXECUTIVE SUMMARY
LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

Transmittal

I am grateful to the Committee and staff who have worked so diligently in developing this plan. I am especially grateful to the individual citizens, community group representatives, and members of the solid waste industry who spent their evenings at Committee meetings, even after a long day's work.

It is a privilege to submit this Solid Waste Management Plan for your consideration. I am confident that the Plan will guide our solid waste service providers in delivering services and will serve our citizens in providing safe and effective solid waste management practices.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Sally Kurtz", written in a cursive style.

Sally R. Kurtz, Chair
Ad Hoc Solid Waste Management Planning Committee

TABLE OF CONTENTS

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

	Page
ACKNOWLEDGEMENTS	i
EXECUTIVE SUMMARY	iii
LIST OF TABLES	xvi
LIST OF FIGURES	xvii
LIST OF APPENDICES	xviii
GLOSSARY OF TERMS.....	xix
ABBREVIATIONS AND ACRONYMS	xxiii
 1.0 INTRODUCTION AND GOALS.....	 1-1
1.1 Loudoun County Solid Waste Management Planning District	1-1
1.2 Solid Waste Management Planning Authority	1-1
1.3 Plan Development Approach	1-2
1.4 Goals	1-2
1.5 LCSWMPD Resolutions of Approval	1-3
1.6 Department of Environmental Quality Checklist	1-22
1.7 Transmittal of Plan Document to DEQ	1-24
1.8 Virginia DEQ Letter of Approval for the 2004 SWMP	1-26
 2.0 WASTE CHARACTERIZATION & QUANTITIES.....	 2-1
2.1 Description of Plan Area	2-1
2.1.1 Transportation	2-1
2.1.2 Jobs	2-2
2.1.3 Housing	2-3
2.1.4 Urban Concentration	2-4
2.2 Population Data and Projections	2-4
2.2.1 Population	2-4
2.2.2 Households	2-6
2.2.3 Employment	2-7
2.2.4 Automobiles	2-8
2.2.5 Landclearing.....	2-8
2.3 Composition of Solid Waste Generated in Loudoun County	2-9
2.3.1 Municipal Solid Waste	2-9
2.3.2 Construction and Demolition Waste	2-9
2.3.3 Vegetative Waste	2-9
2.3.4 Consumer Separated Recyclables	2-10
2.3.5 Waste Dirt	2-10
2.3.6 Household Hazardous Waste	2-10

TABLE OF CONTENTS

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

	Page
2.3.7 Regulated Medical Waste	2-11
2.3.8 Special Wastes	2-11
2.3.9 Hazardous Waste	2-12
2.4 Solid Waste Generation Projections	2-12
2.4.1 Data Sources Used in Determining Waste Generation	2-12
2.5 Solid Waste Management System Demand	2-15
 3.0 SOLID WASTE MANAGEMENT SYSTEM	 3-1
3.1 Introduction	3-1
3.2 Collection	3-1
3.2.1 Municipal Solid Waste Collection by the Private Sector ...	3-1
3.2.2 Role of the County in Collection	3-2
3.2.3 Role of the Towns in Collection	3-2
3.2.4 Individuals	3-3
3.2.5 Distribution of Municipal Waste Collection	3-3
3.2.6 Construction and Demolition Waste Collection	3-4
3.2.7 Vegetative Waste Collection	3-4
3.2.8 Special Waste, HHW and Clean Waste Programs	3-4
3.2.9 Industrial Waste Collection	3-5
3.3 Waste Disposal, Transfer and Processing	3-5
3.3.1 Private Sector Disposal, Transfer, and Processing	3-5
3.3.1.1 MSW and C&D Processing	3-5
3.3.1.2 Vegetative Waste Processing	3-6
3.3.1.3 Waste Dirt Processing	3-6
3.3.1.4 Special Waste Processing	3-7
3.3.2 Role of the County	3-7
3.3.2.1 LCSWMF	3-9
3.3.2.2 Facility Capacity and Phasing Schedule	3-9
3.3.2.3 Regulation of Facilities	3-11
3.3.3 Summary of System Disposal Capacity	3-11
3.3.4 Inventory of Known Disposal Sites	3-14
3.4 Solid Waste Diversion and Recycling in Loudoun County	3-14
3.4.1 Recycling Challenges	3-14
3.4.2 Recycling - The Role of the County	3-14
3.4.2.1 Recycling Compliance and Enforcement	3-15
3.4.2.2 Loudoun County Recycling Policy	3-15
3.4.2.3 Recycling Dropoff Centers (DOC's)	3-16
3.4.2.4 Household Hazardous Waste Collection	3-16
3.4.2.5 Special Waste Collection	3-17
3.4.3 The Role of the Towns	3-19
3.4.4 The Role of the Private Sector Solid Waste Industry	3-20
3.4.5 The Role of the County	3-22

TABLE OF CONTENTS

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

	Page
3.4.6 Recycling Rates	3-22
3.4.6.1 Loudoun County's Recycling Rate	3-23
3.4.6.2 Materials Recycled in Loudoun County	3-23
3.4.7 Community Organizations	3-24
3.5 Strategy for Public Education in Solid Waste Management	3-24
3.6 Dump Complaints/Litter Control	3-24
3.7 Public/Private Partnerships	3-24
3.8 Waste System Flow	3-25
3.8.1 Changes in Flow Patterns	3-25
3.8.2 Changes in Municipal Solid Waste Flow	3-25
3.8.3 Construction and Demolition Waste Flow	3-28
3.8.4 Vegetative Waste Flow	3-28
3.9 External/Regional Factors	3-28
3.9.1 Federal/State Legislation	3-28
3.9.2 Diminished Processing Capacity	3-33
3.9.3 Increasing Fuel/Transportation Costs	3-34
3.9.4 Declining Market Value of Recyclables	3-34
3.10 Issues with Solid Waste Management System	3-34
3.10.1 Current System Has No Warranty, Expressed or Implied	3-34
3.10.2 Waste Changes Every Five Years or So	3-34
3.10.3 Recycling of MSW Declining	3-35
3.10.4 Disposal of Consumer Recyclables	3-35
3.10.5 Service Gaps in Rural Loudoun	3-35
3.10.6 County Has Responsibility for Special Waste	3-35
3.10.7 County Cannot Direct the Allocation of Private Facility Capacity	3-36
3.10.8 Disaster/Emergency Response	3-36
3.10.9 County Cannot Ensure the Preservation of the Status Quo	3-36
 4.0 CONSIDERATION OF THE SOLID WASTE HIERARCHY	 4-1
4.1 The Solid Waste Hierarchy	4-1
4.2 Source Reduction	4-2
4.2.1 Current Status	4-2
4.2.2 Future Considerations	4-2
4.3 Reuse	4-3
4.3.1 Current Status	4-3
4.3.2 Future Considerations	4-4
4.4 Recycling	4-4
4.4.1 Current Status	4-4
4.4.2 Future Considerations	4-5

TABLE OF CONTENTS

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

	Page
4.5 Resource Recovery	4-5
4.5.1 Current Status.....	4-5
4.5.2 Future Considerations.....	4-5
4.6 Incineration	4-6
4.6.1 Current Status.....	4-6
4.6.2 Future Considerations.....	4-6
4.7 Landfilling	4-6
4.7.1 Current Status.....	4-6
4.7.2 Future Considerations.....	4-7
 5.0 COMMITTEE FINDINGS.....	 5-1
5.1 Committee Discussion of Issues.....	5-1
5.2 Summary of Committee Findings.....	5-1
 6.0 OBJECTIVES.....	 6-1
 7.0 IMPLEMENTATION OF THE SOLID WASTE MANAGEMENT PLAN	 7-1
7.0 Implementation Strategy	7-1
7.1 Goal 1	7-1
7.1.1 Objective A.....	7-1
7.1.2 Objective B.....	7-1
7.1.3 Objective C	7-1
7.1.4 Objective D	7-2
7.1.5 Objective E.....	7-2
7.1.6 Objective F.....	7-3
7.1.7 Objective G	7-3
7.2 Goal 2	7-4
7.2.1 Objective A.....	7-4
7.2.2 Objective B.....	7-4
7.2.3 Objective C	7-5
7.2.4 Objective D	7-5
7.3 Goal 3	7-5
7.3.1 Objective A.....	7-5
7.3.2 Objective B.....	7-5
7.3.3 Objective C	7-6
7.3.4 Objective D	7-6
7.3.5 Objective E.....	7-6
7.3.6 Objective F.....	7-7
7.3.7 Objective G	7-7
7.4 Goal 4	7-7
7.4.1 Objective A.....	7-7
7.4.2 Objective B.....	7-8
7.4.3 Objective C	7-8

TABLE OF CONTENTS

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

	Page
7.4.4 Objective D.....	7-8
7.4.5 Objective E.....	7-9
7.5 Goal 5.....	7-9
7.5.1 Objective A.....	7-9
7.5.2 Objective B.....	7-9
7.5.3 Objective C.....	7-9
7.5.4 Objective D.....	7-10
7.5.5 Objective E.....	7-10
7.5.6 Objective F.....	7-10
7.5.7 Objective G.....	7-10
7.6 Goal 6.....	7-11
7.6.1 Objective A.....	7-11
7.6.2 Objective B.....	7-11
7.6.3 Objective C.....	7-11
7.7 Goal 7.....	7-12
7.7.1 Objective A.....	7-12
7.7.2 Objective B.....	7-12
7.7.3 Objective C.....	7-12
7.7.4 Objective D.....	7-12
7.7.5 Objective E.....	7-12
8.0 FUNDING THE SOLID WASTE MANAGEMENT SYSTEM.....	8-1
8.0 Part I: Funding the Current Solid Waste Management System	8-1
8.1 Private Collection	8-1
8.1.1 Individual Residential Collection	8-1
8.1.2 Homeowners' Associations Collection	8-2
8.1.3 Commercial Collection	8-2
8.1.4 Waste Brokers Collection	8-2
8.1.5 Construction Wastes Collection	8-2
8.1.6 Special and Medical Wastes Collection	8-3
8.1.7 Value of the Solid Waste Collection Industry in Loudoun County	8-3
8.1.7.1 Residential Service	8-4
8.1.7.2 Commercial/Business Service	8-4
8.1.7.3 Construction Service	8-4
8.2 Public Collection	8-5
8.2.1 Town Collection Contracts	8-5
8.2.2 Town Departments of Public Works	8-5
8.2.3 Loudoun County School Board and County Public Works	8-5
8.2.4 County Special Collections	8-5
8.2.5 Virginia Department of Transportation (VDOT)	8-5
8.3 Private Facilities	8-5
8.4 Public Facilities	8-6
8.4.1 Existing Disposal Unit ("Old Landfill" Site)	8-6
8.4.1.1 County Facility Existing Debt Service	8-7
8.4.1.2 Woods Road Solid Waste Management Facility ..	8-8

TABLE OF CONTENTS

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

	Page
8.4.1.3 County Facility Revenues	8-8
8.4.1.4 Tipping Fees	8-10
8.5 Loudoun County Programs	8-11
8.5.1 Current Funding Method for County Programs	8-11
8.5.2 Loudoun County Solid Waste Management Facility	8-11
8.5.3 Environmental Compliance Monitoring and Quality Assurance	8-11
8.5.4 Policy, Planning and Compliance	8-11
8.5.4.1 Regulation and Enforcement	8-11
8.5.4.2 SWMP Administration and Compliance	8-13
8.5.5 Solid Waste Diversion and Recycling	8-13
8.5.5.1 Recycling Dropoff Center Facilities	8-13
8.5.5.2 Curbside Residential Recycling	8-13
8.5.5.3 Commercial Recycling	8-13
8.5.5.4 Household Hazardous Waste Events	8-14
8.5.5.5 Education and Public Information	8-14
8.5.5.6 Litter Grant Administration	8-14
8.5.6 Reduction and Reuse	8-14
8.6 Town Programs	8-15
8.6.1 Town Recycling Programs	8-15
8.6.2 Litter Grant	8-15
8.7 Current Programs of NGOs or Agencies.....	8-16
8.0 Part II: Funding the Future Solid Waste Management System	8-16
8.8 Future Waste Reduction and Reuse Programs	8-16
8.9 Future Private Collection	8-16
8.10 Future Public Collection	8-16
8.10.1 County Programs	8-16
8.10.2 Town Programs	8-16
8.11 Private Facility and Construction	8-17
8.11.1 Private Sector Waste Disposal	8-17
8.11.2 Private Sector Waste Processing and Waste Transfer Facility Schedule	8-17
8.12 Future Public Facilities	8-17
8.12.1 Future Landfill Capacity and Facility Construction Schedule	8-17
8.12.2 The Woods Road Solid Waste Management Facility (WRSWMF)	8-18
8.12.3 Future Recycling DOC Site Facilities	8-19
8.12.4 Future Construction Waste Processing	8-19
8.12.5 Future Vegetative Waste Processing	8-19
8.13 Future Public Sector Recycling and Diversion Programs.....	8-19
8.14 Future County Programs	8-19
8.15 Future Town Programs	8-20

TABLE OF CONTENTS
LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

	Page
9.0 PUBLIC PARTICIPATION.....	9-1
9.1 Introduction	9-1
9.2 The Ad Hoc Solid Waste Management Planning Committee	9-1
9.2.1 Preparation and Planning	9-1
9.2.2 Meetings of the Ad Hoc SWMP Committee	9-2
9.2.3 Formal Comment by Interested Parties	9-2
9.2.4 Issues and Options	9-3
9.2.5 Public Input Session: Small Group Networking Process ...	9-4
9.2.6 Referral from the Committee	9-4
9.3 Solid Waste Management Planning District Public Hearing	9-5
9.4 County of Loudoun	9-6
9.5 Town of Middleburg	9-7
9.6 Town of Hamilton	9-7
9.7 Town of Purcellville	9-7
9.8 Town of Round Hill	9-7
9.9 Town of Lovettsville	9-7
9.10 Town of Hillsboro	9-8
9.11 Town of Leesburg	9-8

TABLE OF CONTENTS
LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

LIST OF TABLES

2-1	Population, Households, Employment, Automobiles, and Landclearing, in thousands	2-6
2-2	At Place Employment in Loudoun by Major Industry Classification and Number of Employees (2001)	2-7
2-3	Automobile Waste Generation Projections, in thousands	2-8
2-4	Calculating Waste Quantity Estimates	2-13
2-5	Waste Generation for Loudoun County, 1990-2025, in thousands of tons per year	2-14
3-1	Regional Solid Waste Disposal Facilities	3-8
3-2	LCSWMF Capacity Summary	3-10
3-3	Special and Recyclable Waste Processors	3-19
3-4	Regional Recycling Processors	3-21
8-1	Loudoun County Collection Market	8-3
8-2	Publicly Quoted Rates at Private Facilities in Loudoun County (September 2002)	8-6
8-3	Bond Issues by Amount of Sale and Year Issued	8-7
8-4	Old Landfill Debt Retirement Schedule	8-7
8-5	Debt Retirement Schedule for 1990 WRSWMF Bond Issue	8-8
8-6	Revenue History for the LCSWMF	8-9
8-7	Comparison of LCSWMF Fees to Other Jurisdictions	8-10
8-8	Solid Waste Management Program Costs – FY 03	8-12
8-9	Anticipated LCSWMF Capital Projects	8-18
9-1	Ad Hoc Solid Waste Management Planning Committee Meetings	9-5

TABLE OF CONTENTS

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

LIST OF FIGURES

	Page
1-1 Loudoun County Solid Waste Management Planning District	1-1
2-1 Washington DC-MD-VA-WV PMSA, Loudoun County	2-3
2-2 Population, 1990-2025, in thousands of people	2-5
2-3 MSW, C&D and VW as proportions of their total in 2000	2-10
2-4 Special Wastes Collected in Virginia in 1991 for Recycling, in Tons	2-11
3-1 Distribution of MSW Collection	3-3
3-2 LCSWMF Location of Cells/Phases	3-9
3-3 MSW Facility Capacity	3-12
3-4 C&D Facility Capacity	3-13
3-5 Vegetative Waste Capacity	3-13
3-6 Recycling Rates Reported to VA DEQ	3-22
3-7 Waste Flow Model – MSW	3-26
3-8 Disposition of MSW Generated in Loudoun County, CY2002 (MSW generated that is recycled is excluded)	3-27
3-9 Waste Flow Model – C&D	3-29
3-10 Disposition of C&D Generated in Loudoun County	3-30
3-11 Waste Flow Model – VW	3-31
3-12 Waste Flow Model – Yard Waste	3-32
4-1 Solid Waste Management Hierarchy.....	4-1
4-2 Loudoun County's Waste Hierarchy	4-7
8-1 Total Business for the Loudoun County Landfill--Actual Fee Revenues + Waived Fee Values	8-9

TABLE OF CONTENTS
LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

LIST OF APPENDICES

A	Laws and Regulations Cited	A-1
B	Board of Supervisors and Town Council Items	B-1
C	SWMPC Agenda and Agenda Items.....	C-1
D	SWMPC Meeting Summaries	D-1
E	Chapter 1084, Solid Waste Collection and Transportation	E-1
F	Chapter 1086, Solid Waste Reduction and Recycling	F-1
G	Major & Minor Solid Waste Collectors, 2003.....	G-1
H	Chapter 1082, Solid Waste Storage	H-1
I	Private Solid Waste Management Facilities in Loudoun	I-1
J	Chapter 1080, Solid Waste Management Facilities	J-1
K	Board of Supervisors Landfill Policy	K-1
L	Inventory of Known Disposal Sites	L-1
M	Board of Supervisors Recycling Policy	M-1
N	Recycling Dropoff Center.....	N-1
O	Commonwealth of Virginia Locality Recycling Rate Report	O-1

TABLE OF CONTENTS

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

GLOSSARY OF TERMS

Conditionally Exempt Small Quantity Generators (CESQG): A non-residential waste generator of less than 100 kilograms per month (kg/m) (roughly 220 pounds or 25 gallons) of hazardous wastes, or less than 1 kg/m (roughly 2 pounds) of acutely hazardous waste and who never accumulates more than 1000 kg (roughly 5-55 gallon drums) of hazardous waste at any time. CESQG wastes are hazardous waste but are subject to reduced (exempted) hazardous waste management requirements under Federal Regulations and VHWMR 9 VAC 20-60-12 *et seq.*

Collector: A person or business who collects and transports solid waste or recyclables from residences or businesses for a fee. In Loudoun County, collectors are classified as Major or Minor.

Construction and Demolition Waste (C&D): Waste that is generated during the construction or demolition of buildings. C&D includes lumber, sheetrock, drywall, glass, pipes, concrete, bricks, etc. Trash generated at a construction site and paints are *not* C&D Waste.

Debris Waste: Waste that is generated from landclearing activities. Debris includes stumps, wood, brush, leaves, and soil.

Demolition Waste: Waste that is generated during the demolition of a building. Materials include those in C&D waste. In the Loudoun County Solid Waste Management Plan, Demolition Waste is discussed in conjunction with C&D waste.

Disposal: Disposal is the final destination of solid waste for the person currently possessing it. Legitimate methods of disposal include landfilling or incineration; other methods include illegal dumping into water or onto land, littering, illegal incineration, illegal burying of waste, and the leaking of waste due to improper handling.

Garbage: Garbage is a common term for municipal solid waste. It is composed of discarded materials and includes household trash.

Hazardous Waste: Hazardous wastes are wastes that, if not handled or disposed of properly, could cause injury or death, or damage or pollute land, air or water. Hazardous waste determinations are based on whether the waste is currently "listed" by the EPA or exhibits a "characteristic" of hazardous wastes. Listed wastes are waste that either exhibit one of the characteristics or contain any number of toxic constituents that have been show to be harmful to health and the environment. The EPA list includes over 400 hazardous wastes. Characteristics of hazardous waste are "Ignitable/Flammable", "Corrosive", "Reactive" or "Toxic".

TABLE OF CONTENTS

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

Household Waste: Household waste is a term for garbage or trash generated in a residence.

Household Hazardous Waste (HHW): Materials commonly found in households which, if handled or disposed of improperly, could cause damage to the home or the environment. HHWs include solvents, oil-based paint, insecticides, pesticides, herbicides, gasoline and other fuels, photographic chemicals, and swimming pool chemicals.

Integrated Solid Waste Management: A combination of techniques to manage solid waste economically and efficiently and to incorporate source reduction, recycling and waste combustion and/or landfilling.

Industrial Waste: Waste generated by manufacturing or industrial processes is not regulated as hazardous waste. Industrial waste does not include mining waste or oil and gas waste.

Institutional Waste: Waste generated by hospitals, nursing homes, schools, and other such institutions. Institutional waste can include several other types of waste, including municipal solid waste and medical waste.

Landfill: A solid waste management facility where waste is buried as the primary disposal method.

Loudoun County Solid Waste Management Facility (LCSWMF): A solid waste facility owned and operated by Loudoun County, located southeast of the Town of Leesburg. The LCSWMF features a sanitary landfill, a recycling dropoff center, a special waste dropoff center, and collection areas for scrap metal, waste tires, and vegetative waste.

Major Collector: A permitted collector that operates 4 or more vehicles and collects more than 2,000 tons of waste per year.

Materials Recovery Facility (MRF): A solid waste management facility that receives solid waste and then separates recyclable materials from non-recyclable wastes. The facility then markets the recyclable materials and disposes of the remaining waste.

Minor Collector: A permitted collector that operates fewer than 4 vehicles and collects less than 2,000 tons of waste per year.

Municipal Solid Waste (MSW): Waste that is normally composed of residential, commercial, and institutional waste. MSW is also known commonly by the terms “refuse,” “trash,” or “garbage.”

Nonhazardous Waste: Solid wastes not classified by listing or characteristic as hazardous waste.

TABLE OF CONTENTS

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

Principal Recyclable Materials (PRMs): Includes paper, metal (except car bodies), plastic, glass, yard waste, wood, and textiles, or material as may be authorized by the Director of DEQ.

Recyclable Materials: Any material separated from the waste stream to be used in the manufacture of a new product.

Recycling: Separating a given waste material from the waste stream and processing it so that it may be used again as a raw material for a product, which may or may not be similar to the original product. Recycling does not include processes that only involve size reduction.

Recycling Dropoff Center (DOC): An approved site where recyclables are accepted from the public. A DOC does *not* feature any processing equipment.

Refuse: Refuse is a common term for municipal solid waste. It is composed of discarded materials and includes household trash. Refuse generally is solids, not liquids.

Residential Waste: Residential Waste is a term for garbage or trash generated in a residence.

Reuse: Separating a given solid waste material from the waste stream and using it, without processing or changing its form, other than size reduction, for the same or another end use.

Rubbish: Rubbish is a common term referring to trash or garbage that is not generated *inside* a home. Rubbish includes trimmings from shrubs or trees, grass, rags, old printed matter, and other paper.

Sanitary Landfill: An engineered facility for the burial of solid waste. A Sanitary Landfill is located, designed, constructed, and operated so as to contain and isolate the buried waste and to minimize present or potential hazards to human health or the environment. The LCSWMP includes a sanitary landfill.

Solid Waste: Unwanted materials resulting from household disposal, commercial and industrial operations, agricultural operations, or community activities. Solid Waste includes garbage, refuse, sludge, or other discarded material. Solid Waste can be solids, liquids, semisolids, and gases. Solid Waste does not include materials found in sewage, materials found in irrigation return flows, or nuclear wastes and by-products.

TABLE OF CONTENTS

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

Source Reduction: Any action that reduces or eliminates the generation of waste at the source, usually within a process. Source reduction measures include process modifications, feedstock substitutions, improvements in feedstock purity, improvements in housekeeping and management practices, increases in the efficiency of machinery, and recycling within a process.

Source-separated Recyclables: Recyclable materials separated from the trash by the person that generated them. Recyclables placed in separate curbside containers by residents is an example of Source-separated Recyclables.

Supplemental Recyclable Materials: Waste tires, used oil, used oil filters, used antifreeze, automobile bodies, construction waste, demolition waste, debris waste, batteries, ash, sludge or large diameter tree stumps, or material as may be authorized by the Director of DEQ.

Trash: Trash is a common term for municipal solid waste. It is composed of discarded materials and includes household waste.

Vegetative Waste (VW): Decomposable materials generated by yard and lawn care or landclearing activities. Vegetative Waste includes leaves, grass, trimmings, shrub prunings, bar, limbs, roots, and stumps.

Vegetative Waste Management Facility (VWMF): A solid waste facility that collects, processes, and manages vegetative waste. Products from a VWMF include mulch and wood chips.

Waste Hierarchy: The EPA and State regulatory ranking of methods for handling solid waste in order of preference. The top of the hierarchy is source reduction and reuse, followed by recycling, with waste combustion and/or landfilling at the bottom, or at least preferred, on the hierarchy.

Waste Transfer Station (WTS): A facility where solid waste is transferred from collection vehicles (e.g., trash trucks) to hauling vehicles (e.g., tractor trailers) for transport to another facility for disposal or resource recovery.

Yard Waste (YW): Materials generated by lawn and yard care. Yard waste includes leaves, grass, trimmings, and brush. Yard waste is a *kind* of vegetative waste; yard waste does *not* include roots or stumps larger than 6 inches in diameter.

TABLE OF CONTENTS

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

ABBREVIATIONS AND ACRONYMS

AAA: AAA Recycling and Trash Removal Services, Inc.

A&E: Architectural and Engineering

ARI: Air Conditioning & Refrigeration Institute

BFI: Browning-Ferris Industries, Inc.

BOS: (Loudoun County) Board of Supervisors

C&D: Construction and Demolition

CESQG: Conditionally Exempt Small Quantity Generators (of hazardous waste)

CFC: Chlorofluorocarbon

CIP: Capital Improvement Plan

CPG: Comprehensive Procurement Guidelines

CRT: Cathode Ray Tube

CSI: Con-Serv Industries, Inc.

CY: When “CY” *precedes* a year, it means “Calendar Year” (e.g., CY2003);
when “CY” *follows* an expression of quantity, it means “Cubic Yards” (e.g.,
5,000 CY).

DED: (Loudoun County) Department of Economic Development

DEQ: (Virginia) Department of Environmental Quality

DOC: Dropoff Center (Usually for recycling)

DOT: Department of Transportation

EPA: (United States) Environmental Protection Agency

FY: Fiscal Year; in Loudoun County, the Fiscal Year runs July 1 to June 30.

HCFC: Hydrochlorofluorocarbon

HH: Household

HOA: Homeowners’ Association

HHW: Household Hazardous Waste

LCD: Land Clearing Debris

LCLF: Loudoun County Landfill

LCSWMF: Loudoun County Solid Waste Management Facility

LCSWMPD: Loudoun County Solid Waste Management Planning District

MARC: Maryland Rail Commuter Service

MRF: Materials Recovery Facility

MSW: Municipal Solid Waste

TABLE OF CONTENTS

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN

MWCOG: Metropolitan Washington Council of Governments

NGO: Non-governmental Organization

Ni-Cad: Nickel-Cadmium

NVRC: Northern Virginia Regional Commission

OSWM: (Loudoun County) Office of Solid Waste Management

P2: Pollution Prevention

PAYT: Pay-As-You-Throw

PMSA: Primary Metropolitan Statistical Area; Loudoun County is part of the Washington, DC, Primary Metropolitan Statistical Area

PRM: Principal Recyclable Material as defined by 9 VAC 20-130-10 *et seq.*

RCRA: Resource Conservation and Recovery Act

RMW: Regulated Medical Waste

SRM: Supplemental Recyclable Material as defined by 9 VAC 20-130-10 *et seq.*

SWMF: Solid Waste Management Facility

SWMP: Solid Waste Management Plan

SWMPC: Ad Hoc Solid Waste Management Planning Committee

TS: Transfer Station

TSD: Treatment/Storage/Disposal Facility

UL: Underwriters Laboratories

UOFACMS: (Virginia) Used Oil, Filter, and Antifreeze Consumer Management Study

VAC: Virginia Administrative Code.

VDOT: Virginia Department of Transportation

VW: Vegetative Waste

VWMF: Vegetative Waste Management Facility

WMX: Waste Management, Inc.

WRSWMF: Woods Road Solid Waste Management Facility

WTE: Waste-to-Energy

WTS: Waste Transfer Station

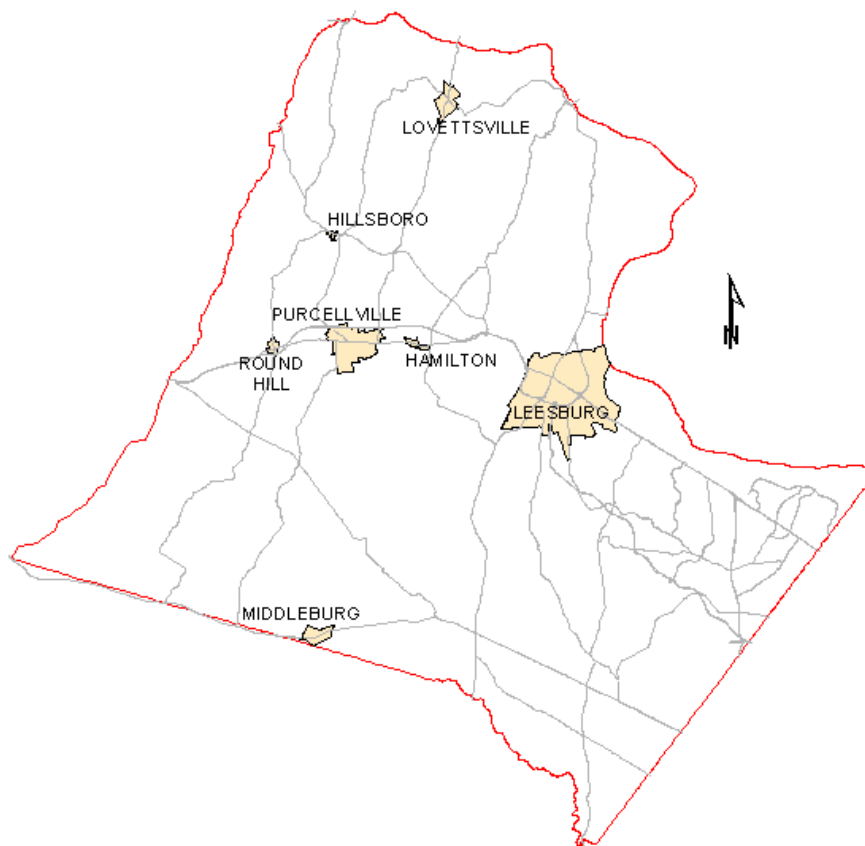
CHAPTER 1.0 SOLID WASTE MANAGEMENT PLAN INTRODUCTION AND GOALS

1.0 INTRODUCTION AND GOALS

1.1 Loudoun County Solid Waste Management Planning District

This solid waste management plan provides an integrated strategy for the management of nonhazardous solid waste generated within the Loudoun County Solid Waste Management Planning District (LCSWMPD). The District is comprised of all unincorporated and incorporated areas within Loudoun County, including the Towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill. Originally, the district was comprised of all towns except Purcellville and Round Hill, who joined in 1995. The Town of Leesburg joins the District upon adoption of the Plan.

Figure 1-1: Loudoun County Solid Waste Management Planning District



1.2 Solid Waste Management Planning Authority

This document is intended to comply with the Code of Virginia (Section 10.1-1411) and the Virginia Regulations for Solid Waste Management Planning (9 VAC 20-130-10 et seq.), which give statutory authority and regulatory responsibility and accountability to local governments for planning for the handling of all types of nonhazardous solid waste (**Appendix A** lists code and regulations cited in this plan).

CHAPTER 1.0

SOLID WASTE MANAGEMENT PLAN INTRODUCTION AND GOALS

1.3 Plan Development Approach

The formal plan development process began with the creation of an Ad Hoc Solid Waste Management Planning Committee by the Board of Supervisors in July 2002 (copies of all Board Items are found in **Appendix B**). Each of the seven incorporated Towns designated representatives to serve on the Ad Hoc Committee with the appointed Board representatives. The purpose of the Ad Hoc Committee was to distill the background information, make findings, identify issues, and options, and develop a draft plan for consideration and adoption by local legislative bodies including the Board of Supervisors and the Town Councils for each of the seven member towns.

The Agendas and Items presented to the Committee are included as **Appendix C**. Meeting summaries for each meeting documenting the discussions and decisions of the Committee are included as **Appendix D**. The role and actions of the Ad Hoc Committee are detailed further in Chapter 9 of this Plan.

1.4 Goals

The members of the Loudoun County Solid Waste Management Planning District have adopted the following goals to ensure that the District's solid waste management needs are met.

Goal 1:

Establish a dynamic planning process and document that meets Virginia Statutory and Regulatory requirements, that fosters public participation, and that ensures that the District's solid waste management needs will be met.

Goal 2:

Identify and foster mechanisms to ensure that adequate solid waste collection services are available throughout the District.

Goal 3:

Identify and provide for the availability of facilities to ensure that adequate options for solid waste disposal are available throughout the District.

Goal 4:

Identify, implement, and/or maintain programs for ensuring that solid wastes are managed in accordance with Federal and State laws and regulations in a manner that protects public health, safety, and the environment.

CHAPTER 1.0

SOLID WASTE MANAGEMENT PLAN INTRODUCTION AND GOALS

Goal 5:

Develop and sustain a Countywide program that will achieve or exceed the State's mandatory recycling rate.

Goal 6:

Provide safe recycling and disposal options for special wastes that may pose harm to the environment and/or to public health and safety.

Goal 7:

Develop an Implementation Plan that sets forth how the Objectives of the SWMP will be met.

1.5 LCSWMPD Resolutions of Approval

Each of the District's member Towns as well as the Loudoun County Board of Supervisors have considered this plan. Documentation of their reviews and approvals are shown in **Appendix B**. Resolutions for each of the member jurisdictions follow.

TOWN OF HAMILTON

Mayor
Keith Reasoner

Council
John D. Unger, Vice-Mayor
Michael E. Snyder
Craig M. Green
Gregory K. Wilmoth
Connie S. McCrary
James A. Moon



Secretary-Treasurer
Zoning Administrator
Kay Y. Tewell

53 East Colonial Highway
P.O. Box 130
Hamilton, VA 20159
Phone: (540) 338-2811
FAX: (540) 338-9263
E-mail Address:
hamiltonva@adelphia.net

RESOLUTION SOLID WASTE MANAGEMENT PLAN FOR THE LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING DISTRICT (LCSWMPD)

A RESOLUTION: That the Town of Hamilton adopt the Solid Waste Management Plan dated March 17, 2003, as revised for and by the Public Hearing conducted on April 8, 2003, for The Loudoun County Solid Waste Management Planning District (LCSWMPD).

The Town Council of the Town of Hamilton, in a regular meeting on May 12, 2003 adopted the following:

WHEREAS, Loudoun County, the Town of Hamilton, the Town of Hillsboro, Town of Leesburg, the Town of Lovettsville, the Town of Middleburg, the Town of Purcellville, the Town of Round Hill are the local governments for the residents living within the boundaries of Loudoun County, and

WHEREAS, the Virginia Waste Management Board (hereinafter the State) has been authorized by State Code to promulgate and enforce such regulations as may be necessary to carry out its duties and powers and the intent of the Virginia Waste Management Act and related federal acts, and

WHEREAS, it is the policy of the State to require each city, county, and town to develop and maintain comprehensive and integrated solid waste management plans that, at a minimum address all solid waste generated in the jurisdiction, and, consider all components of the following hierarchy,

- Source Reduction
2. Reuse
3. Recycling
4. Resource Recovery (Waste-to-Energy)
5. Incineration
6. Landfilling, and
7. Plan Implementation, and

WHEREAS, the State has mandated that all localities sustain a recycling rate of 25%, and

WHEREAS, the State has required all local governments to update their Solid Waste Management Plans for current conditions and to address the solid waste management needs for the next 20 years, and

WHEREAS, all updated plans must be submitted to the Virginia Department of Environmental Quality by July, 1 2004,

NOW, THEREFORE BE IT RESOLVED, this Council does hereby authorize the Town of Leesburg to join and participate in the LCSWMPD, which currently includes the Towns of Hamilton, Hillsboro, Lovettsville, Middleburg, Purcellville, Round Hill, and the unincorporated portions of Loudoun County, with the same benefits and privileges as existing members, and requests that the other member jurisdictions likewise concur,

BE IT FURTHER RESOLVED, this Council does hereby adopt the Loudoun County Solid Waste Management Plan (presented at the April 8, 2003 Public Hearing, as revised),

BE IT FURTHER RESOLVED, this Council requests and authorizes the staff of the County Office of Solid Waste Management to submit the adopted Solid Waste Management Plan to the Virginia Department of Environmental Quality on behalf of the District.

Recorded Vote:

Motion by: Craig Green

Seconded by: Gregory Wilmoth

Yeas: Mr. Unger, Mr. Snyder, Mr. Green, Mr. Wilmoth, Mr. Moon and Ms. McCrary

Nays: None

Abstentions: None

Absent for vote: None

Adopted this 12th day of May, 2003



Lee Ann Green, Recorder

**Resolution: ADOPT SOLID WASTE MANAGEMENT PLAN
FOR
LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING DISTRICT
(LCSWMPD)**

A RESOLUTION: That the Town of Hillsboro adopt the Solid Waste Management Plan dated March 17, 2003, as revised for and by the Public Hearing conducted on April 28, 2003, for the Loudoun County Solid Waste Management Planning District (LCSWMPD).

The Town Council of the Town of Hillsboro, in a regular meeting on Tuesday, June 17, 2003, adopted the following:

WHEREAS, Loudoun County, the Town of Hamilton, the Town of Hillsboro, the Town of Leesburg, the Town of Lovettsville, the Town of Middleburg, the Town of Purcellville, and the Town of Round Hill are the local governments for the residents living within the boundaries of Loudoun County; and

WHEREAS, the Virginia Waste Management Board (hereinafter "the State") has been authorized by State Code to promulgate and enforce such regulations as may be necessary to carry out its duties and powers and the intent of the Virginia Waste Management Act and related federal acts; and

WHEREAS, it is the policy of the State to require each city, county, and town to develop and maintain comprehensive and integrated solid waste management plans that, at a minimum address all solid waste generated in the jurisdiction, and, consider all components of the following hierarchy:

1. Source Reduction
2. Reuse
3. Recycling
4. Resource Recovery (Waste-to-Energy)
5. Incineration
6. Landfilling, or
7. Plan Implementation; and

WHEREAS, the State has mandated that all localities sustain a recycling rate of 25%; and

WHEREAS, the State has required all local governments to update the Solid Waste Management Plans for current conditions and to address the solid waste management needs for the next 20 years; and

WHEREAS, all updated plans must be submitted to the Virginia Department of Environmental Quality by July 1, 2004.

NOW, THEREFORE, BE IT RESOLVED, this Council does hereby authorize the Town of Hillsboro to join and participate in the LCSWMPD, which currently includes the Towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, Round Hill and the unincorporated portions of Loudoun County, with the same benefits and privileges as existing members, and requests that the other member jurisdictions likewise concur.

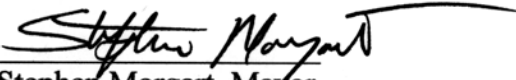
BE IT FURTHER RESOLVED, this Council does hereby adopt the Loudoun County Solid Waste Management Plan (presented at the April 8, 2003, public hearing, as revised).

BE IT FURTHER RESOLVED, this Council requests and authorizes the staff of the Office of Solid Waste Management to submit the adopted Solid Waste Management Plan to the Virginia Department of Environmental Quality on behalf of the District.

Recorded Vote:

Moved by: L. Banks
Seconded by: R. Vance
Ayes: Morgart, Vance, Banks, Ware
Nays: None
Abstain: None
Absent for Vote: Raich, Stribling

ATTEST:


Stephen Morgart, Mayor

The Town of
Leesburg,
Virginia

PRESENTED September 9, 2003

RESOLUTION NO. 2003-126

ADOPTED September 9, 2003

A RESOLUTION: ADOPTING THE SOLID WASTE MANAGEMENT PLAN DATED MARCH 17, 2003, AS REVISED FOR AND BY THE PUBLIC HEARING CONDUCTED ON APRIL 8, 2003, FOR THE LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING DISTRICT (LCSWMPD)

WHEREAS, Loudoun County, the Town of Hamilton, the Town of Hillsboro, Town of Leesburg, the Town of Lovettsville, the Town of Middleburg, the Town of Purcellville, the Town of Round Hill are the local governments for the residents living within the boundaries of Loudoun County; and

WHEREAS, the Virginia Waste Management Board (hereinafter the State) has been authorized by State Code to promulgate and enforce such regulations as may be necessary to carry out its duties and powers and the intent of the Virginia Waste Management Act and related federal acts; and

WHEREAS, it is the policy of the State to require each city, county, and town to develop and maintain comprehensive and integrated solid waste management plans that, at a minimum address all solid waste generated in the jurisdiction, and, consider all components of the following hierarchy,

- Source Reduction
2. Reuse
3. Recycling
4. Resource Recovery (Waste-to-Energy)
5. Incineration
6. Landfilling, and
- 7 Plan Implementation; and

WHEREAS, the State has mandated that all localities sustain a recycling rate of 25%; and

WHEREAS, the State has required all local governments to update their Solid Waste Management Plans for current conditions and to address the solid waste management needs for the next 20 years; and

WHEREAS, all updated plans must be submitted to the Virginia Department of Environmental Quality by July 2003; and

WHEREAS, a Solid Waste Management Plan was prepared by an Ad Hoc Committee for the LCSWMPD; and

A RESOLUTION: ADOPTING THE SOLID WASTE MANAGEMENT PLAN DATED MARCH 17, 2003, AS REVISED FOR AND BY THE PUBLIC HEARING CONDUCTED ON APRIL 8, 2003, FOR THE LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING DISTRICT (LCSWMPD)

WHEREAS, the Draft Solid Waste Management Plan was presented at a Public Hearing on April 18, 2003 at the Loudoun County Board of Supervisors; and

WHEREAS, The Board of Supervisors adopted the Solid Waste Master Plan on May 5, 2003; and

WHEREAS, The Leesburg Environmental Advisory Commission recommends that the Leesburg Town Council adopt the Solid Waste Master Plan.

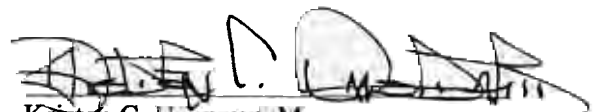
THEREFORE, RESOLVED by the Council of the Town of Leesburg in Virginia as follows:

SECTION I. The Town Council of the Town of Leesburg hereby confirms the participation of the Town of Leesburg in the LCSWMPD, which currently includes the Town of Hamilton, Hillsboro, Lovettsville, Middleburg, Purcellville, Round Hill, and the unincorporated portions of Loudoun County, with the same benefits and privileges as existing members, and requests that the other member jurisdictions likewise concur.

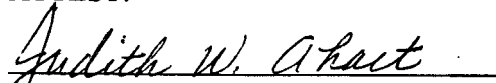
SECTION II. The Leesburg Town Council does hereby adopt the Loudoun County Solid Waste Management Plan dated March 17, 2003 presented at the April 8, 2003 Public Hearing, as revised.

SECTION III. The Leesburg Town Council hereby requests and authorizes the staff of the County Office of Solid Waste Management to submit the adopted Solid Waste Management Plan to the Virginia Department of Environmental Quality on behalf of the District.

PASSED this 9th day of September 2003.


Kristen C. Umstatter, Mayor
Town of Leesburg

ATTEST:


Clerk of Council

R03:LCSWMPD

The Town of Lovettsville

**RESOLUTION
SOLID WASTE MANAGEMENT PLAN
FOR
THE LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING DISTRICT
(LCSWMPD)**

RESOLUTION: That the Town Council of the Town of Lovettsville adopt the Solid Waste Management Plan dated March 17, 2003, as revised for and by the Public Hearing conducted on April 8, 2003, for The Loudoun County Solid Waste Management Planning District (LCSWMPD).

WHEREAS, Loudoun County, the Town of Hamilton, the Town of Hillsboro, the Town of Leesburg, the Town of Lovettsville, the Town of Middleburg, the Town of Purcellville, the Town of Round Hill are the local governments for the residents living within the boundaries of Loudoun County; and

WHEREAS, the Virginia Waste Management Board (hereinafter the State) has been authorized by State Code to promulgate and enforce such regulations as may be necessary to carry out its duties and powers and the intent of the Virginia Waste Management Act and related Federal acts; and

WHEREAS, it is the policy of the State to require each city, county and town to develop and maintain comprehensive and integrated solid waste management plans that, at a minimum address all solid waste generated in the jurisdiction, and, consider all components of the following hierarchy: (1) Source Reduction, (2) Reuse, (3) Recycling, (4) Resource Recovery (Waste-to-Energy), (5) Incineration, (6) Landfilling, (7) Plan Implementation; and

WHEREAS, the State has mandated that all localities sustain a recycling rate of twenty-five percent (25%); and

WHEREAS, the State has required all local governments to update their Solid Waste Management Plans for current conditions and to address the solid waste management needs for the next twenty (20) years; and

WHEREAS, all updated plans must be submitted to the Virginia Department of Environmental Quality by July 1, 2004.

NOW, THEREFORE, BE IT RESOLVED, that the Town Council of the Town of Lovettsville hereby authorizes the Mayor to sign this resolution and join and participate in the Loudoun County Solid Waste Management Plan, which currently includes the Towns of Hamilton, Hillsboro, Leesburg, Middleburg, Purcellville, Round Hill, and the unincorporated portions of Loudoun County, with the same benefits and privileges as existing members, and requests that the other member jurisdictions likewise concur.

The German Settlement

Resolution: Loudoun County Solid Waste Management Plan
June 5, 2003
Page 2

BE IT FURTHER RESOLVED, that this Town Council does hereby adopt the Loudoun County Solid Waste Management Plan, which was presented for Public Hearing, as revised, on April 8, 2003, and after presentations were given to our Town Council by Catoclin District Supervisor Sally Kurtz, Director of the Office of Solid Waste Management, Rick Weber, and Randy Reed on May 29, 2003.

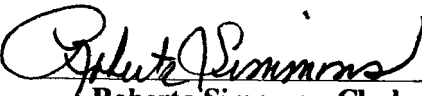
BE IT FURTHER RESOLVED, that the Town Council of the Town of Lovettsville requests and authorizes the staff of the Loudoun County Office of Solid Waste Management to submit the adopted Solid Waste Management Plan to the Virginia Department of Environmental Quality on behalf of the District.

Adopted this 5th day of June 2003.



ELAINE WALKER, MAYOR

ATTEST:



Roberta Simmons, Clerk of Council

RESOLUTION
SOLID WASTE MANAGEMENT PLAN
FOR
THE LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING DISTRICT
(LCSWMPD)

A RESOLUTION: That the Town of Middleburg adopt the Solid Waste Management Plan dated March 17, 2003, as revised for and by the Public Hearing conducted on April 8, 2003, for The Loudoun County Solid Waste Management Planning District (LCSWMPD).

The Town Council of the Town of Middleburg, in a regular meeting on Thursday, May 8, 2003 adopted the following:

WHEREAS, Loudoun County, the Town of Hamilton, the Town of Hillsboro, Town of Leesburg, the Town of Lovettsville, the Town of Middleburg, the Town of Purcellville, the Town of Round Hill are the local governments for the residents living within the boundaries of Loudoun County, and

WHEREAS, the Virginia Waste Management Board (hereinafter the State) has been authorized by State Code to promulgate and enforce such regulations as may be necessary to carry out its duties and powers and the intent of the Virginia Waste Management Act and related federal acts, and

WHEREAS, it is the policy of the State to require each city, county, and town to develop and maintain comprehensive and integrated solid waste management plans that, at a minimum address all solid waste generated in the jurisdiction, and, consider all components of the following hierarchy,

1. Source Reduction
2. Reuse
3. Recycling
4. Resource Recovery (Waste-to-Energy)
5. Incineration
6. Landfilling, and
7. Plan Implementation, and

WHEREAS, the State has mandated that all localities sustain a recycling rate of 25%, and

WHEREAS, the State has required all local governments to update their Solid Waste Management Plans for current conditions and to address the solid waste management needs for the next 20 years, and

WHEREAS, all updated plans must be submitted to the Virginia Department of Environmental Quality by July, 1 2004.

NOW, THEREFORE BE IT RESOLVED, this Council does hereby authorize the Town of Leesburg to join and participate in the LCSWMPD, which currently includes the Towns of Hamilton, Hillsboro, Lovettsville, Middleburg, Purcellville, Round Hill, and the unincorporated portions of Loudoun County, with the same benefits and privileges as existing members, and requests that the other member jurisdictions likewise concur,

BE IT FURTHER RESOLVED, this Council does hereby adopt the Loudoun County Solid Waste Management Plan (presented at the April 8, 2003 Public Hearing, as revised),

BE IT FURTHER RESOLVED, this Council requests and authorizes the staff of the County Office of Solid Waste Management to submit the adopted Solid Waste Management Plan to the Virginia Department of Environmental Quality on behalf of the District.

Recorded Vote: May 8, 2003

Moved by: Vice-Mayor Mark Tate

Seconded by: Darlene Kirk


Ayes: Tate, Davis, Hyre, Kirk, Lewis, New, and Snyder

Nays:

Abstain:

Absent for Vote:

ATTEST:


Clerk of Council

WHEREAS, it is the policy of the State to require each city, county and town to develop and maintain comprehensive and integrated solid waste management plans that, at a minimum, address all solid waste generated in the jurisdiction, and consider all components of the following hierarchy:

THAT THE COUNCIL IN THE TOWN OF PURCELLVILLE, VIRGINIA ADOPT THE SOLID WASTE MANAGEMENT PLAN DATED MARCH 17, 2003, AS REVISED FOR AND BY THE PUBLIC HEARING CONDUCTED ON APRIL 8, 2003, FOR THE LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING DISTRICT (LCSWMPD)

- Source Reduction
- Reuse
- Recycling
- Resource Recovery (Waste-to-Energy)
- Incineration
- Landfilling
- Plan Implementaion; and

WHEREAS, the State has mandated that all localities sustain a recycling rate of 25%; and

WHEREAS, the State has required all local governments to update their Solid Waste Management Plans for current conditions and to address the solid waste management needs for the next 20 years; and

WHEREAS, all updated plans must be submitted to the Virginia Department of Environmental Quality by July 1, 2004.


NOW, THEREFORE, BE IT RESOLVED that the Council in the Town of Purcellville, Virginia does hereby authorize the Town of Leesburg to join and participate in the LCSWMPD, which currently includes the Town of Hamilton, Town of Hillsboro, Town of Lovettsville, Town of Middleburg, Town of Purcellville, Town of Round Hill and the unincorporated portions of Loudoun County, with the same benefits and privileges as existing members, and requests that the other member jurisdictions likewise concur.

BE IT FURTHER RESOLVED the Council in the Town of Purcellville, Virginia does hereby adopt the Loudoun County Solid Waste Management Plan (presented at the April 8, 2003 Public Hearing, as revised).

BE IT FURTHER RESOLVED the Council in the Town of Purcellville, Virginia directs and authorizes the staff of the County Office of Solid Waste Management to submit the adopted Solid Waste Management Plan to the Virginia Department of Environmental Quality on behalf of the District.

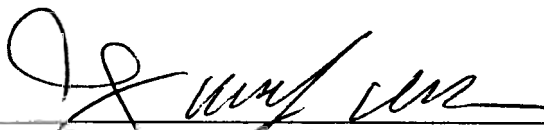
THAT THE COUNCIL IN THE TOWN OF PURCELLVILLE, VIRGINIA ADOPT THE SOLID WASTE MANAGEMENT PLAN DATED MARCH 17, 2003, AS REVISED FOR AND BY THE PUBLIC HEARING CONDUCTED ON APRIL 8, 2003, FOR THE LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING DISTRICT (LCSWMPD)

PASSED this 13th day of May, 2003



William T. Druhan, Jr., Mayor
Town of Purcellville

ATTEST:



Jennifer Moore, Town Clerk

RESOLUTION
SOLID WASTE MANAGEMENT PLAN
FOR
THE LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING DISTRICT
(LCSWMPD)

A RESOLUTION: That the Town of Round Hill adopt the Solid Waste Management Plan dated March 17, 2003, as revised for and by the Public Hearing conducted on April 8, 2003, for The Loudoun County Solid Waste Management Planning District (LCSWMPD).

The Town Council of the Town of Round Hill, in a regular meeting on May 15, 2003 adopted the following:

WHEREAS, Loudoun County, the Town of Hamilton, the Town of Hillsboro, Town of Leesburg, the Town of Lovettsville, the Town of Middleburg, the Town of Purcellville, the Town of Round Hill are the local governments for the residents living within the boundaries of Loudoun County, and

WHEREAS, the Virginia Waste Management Board (hereinafter the State) has been authorized by State Code to promulgate and enforce such regulations as may be necessary to carry out its duties and powers and the intent of the Virginia Waste Management Act and related federal acts, and

WHEREAS, it is the policy of the State to require each city, county, and town to develop and maintain comprehensive and integrated solid waste management plans that, at a minimum address all solid waste generated in the jurisdiction, and, consider all components of the following hierarchy,

1. Source Reduction
2. Reuse
3. Recycling
4. Resource Recovery (Waste-to-Energy)
5. Incineration
6. Landfilling, and
7. Plan Implementation, and

WHEREAS, the State has mandated that all localities sustain a recycling rate of 25%, and

WHEREAS, the State has required all local governments to update their Solid Waste Management Plans for current conditions and to address the solid waste management needs for the next 20 years, and

WHEREAS, all updated plans must be submitted to the Virginia Department of Environmental Quality by July 1, 2004,

KDY | NOW, THEREFORE BE IT RESOLVED, this Council does hereby authorize the Town of ~~Round Hill~~ ^{Leesburg} to join and participate in the LCSWMPD, which currently includes the Towns of Hamilton, Hillsboro, Lovettsville, Middleburg, Purcellville, Round Hill, and the unincorporated portions of Loudoun County, with the same benefits and privileges as existing members, and requests that the other member jurisdictions likewise concur,

BE IT FURTHER RESOLVED, this Council does hereby adopt the Loudoun County Solid Waste Management Plan (presented at the April 8, 2003 Public Hearing, as revised),

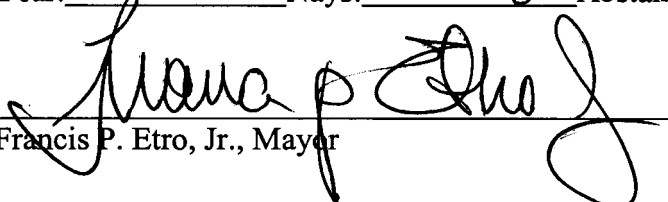
BE IT FURTHER RESOLVED, this Council requests and authorizes the staff of the County Office of Solid Waste Management to submit the adopted Solid Waste Management Plan to the Virginia Department of Environmental Quality on behalf of the District.

Recorded Vote:

Moved by: MARY ANNE GRAHAM

Seconded by: MEG J. NASH

Year: 0 Nays: 0 Abstain:


Francis P. Etro, Jr., Mayor

ATTEST:


Clerk of Council



Loudoun County, Virginia

www.loudoun.gov

County Administration

1 Harrison Street, S.E., 5th Floor, P.O. Box 7000, Leesburg, VA 20177-7000

Telephone (703) 777-0200 • Fax (703) 777-0325

At a meeting of the Board of Supervisors of Loudoun County, Virginia, held in the County Administration Building, Board of Supervisors' Meeting Room, 1 Harrison St., S.E., Leesburg, Virginia, on Monday, May 5, 2003 at 9:00 a.m.

PRESENT: Scott K. York, Chairman
Eleanore C. Towe, Vice Chairman
William Bogard
James G. Burton
Eugene A. Delgaudio
Chuck Harris
Mark Herring
J. Drew Hiatt
Sally Kurtz

**IN RE: LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING
DISTRICT REVISED SOLID WASTE MANAGEMENT PLAN**

Ms. Kurtz moved that the Board of Supervisors adopt the Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District as contained in Attachment 1 and as revised by Attachment 2. She further moved that the Chair be authorized to sign the Resolution of Approval (Attachment 3), and that staff be authorized and directed to submit the LCSWMP to the Virginia Department of Environmental Quality upon adoption by all District members and to follow up the Plan's approval and to make only editorial revisions necessary to insure consistency.

Seconded by Mr. Burton.

Voting on the Motion: Supervisors Bogard, Burton, Harris, Herring, Kurtz, and Towe – Yes;
Supervisors Delgaudio and Hiatt – No; Chairman York – Absent for the Vote.

A COPY TESTE:

**DEPUTY CLERK FOR THE LOUDOUN
COUNTY BOARD OF SUPERVISORS**

DCR:05-05-03 bos resolution –h-solid waste management plan

**Resolution of Approval
Solid Waste Management Plan
Loudoun County Solid Waste Management Planning District
Loudoun County Board of Supervisors
May 5, 2003**

A RESOLUTION: That the County of Loudoun adopt the Solid Waste Management Plan dated March 17, 2003, as revised for and by the Public Hearing conducted on April 8, 2003, for The Loudoun County Solid Waste Management Planning District (LCSWMPD).

The Loudoun County Board of Supervisors, in a regular meeting on May 5, 2003, adopted the following:

WHEREAS, Loudoun County, the Town of Hamilton, the Town of Hillsboro, the Town of Leesburg, the Town of Lovettsville, the Town of Middleburg, the Town of Purcellville, and the Town of Round Hill are the local governments for the residents living within the boundaries of Loudoun County, and comprise the LCSWMP District and

WHEREAS, the Virginia Waste Management Board (hereinafter the State) has been authorized by State Code to promulgate and enforce such regulations as may be necessary to carry out its duties and powers and the intent of the Virginia Waste Management Act and related federal acts, and

WHEREAS, it is the policy of the State to require each city, county, and town to develop and maintain comprehensive and integrated solid waste management plans that, at a minimum, address all solid waste generated in the jurisdiction, and consider all components of the following hierarchy:

- Source Reduction
- Reuse
- Recycling
- Resource Recovery (Waste-to-Energy)
- Incineration
- Landfilling, and
- Plan Implementation, and

WHEREAS, the State has mandated that all localities sustain a recycling rate of 25%, and

WHEREAS, the State has required all local governments to update their Solid Waste Management Plans for current conditions and to address the solid waste management needs for the next 20 years, and

WHEREAS, all updated plans must be submitted to the Virginia Department of Environmental Quality by July, 1 2004,

NOW, THEREFORE BE IT RESOLVED, the Board of Supervisors does hereby authorize the Town of Leesburg to join and participate in the LCSWMPD, which currently includes the Towns of Hamilton, Hillsboro, Lovettsville, Middleburg, Purcellville, Round Hill and the unincorporated portions of Loudoun County, with the same benefits and privileges as existing members, and requests that the other member jurisdictions likewise concur,

BE IT FURTHER RESOLVED, the Loudoun County Board of Supervisors does hereby adopt the Loudoun County Solid Waste Management Plan (presented at the April 8, 2003 Public Hearing, as revised),

BE IT FURTHER RESOLVED, the Board of Supervisors directs and authorizes the staff of the County Office of Solid Waste Management to submit the adopted Solid Waste Management Plan to the Virginia Department of Environmental Quality on behalf of the District.

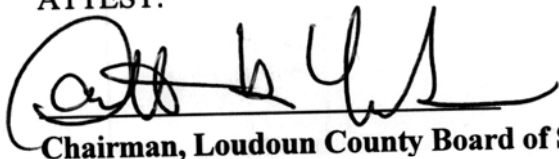
Recorded Vote: 6-2-1

Moved by: Sally Kurtz

Seconded by: James Burton

Yeas: William Bogard, James Burton, Chuck Harris, Mark Herring, Sally Kurtz, and Eleanore Towe; Nays: Eugene Delgaudio and J. Drew Hiatt; Absent for the Vote: Scott York

ATTEST:



Chairman, Loudoun County Board of Supervisors

CHAPTER 1.0
SOLID WASTE MANAGEMENT PLAN INTRODUCTION AND GOALS

1.6 Department of Environmental Quality Checklist

As Required by 9 VAC 20-130-120 through 9 VAC 20-130-150

**PLAN
PAGE**

A. The Solid Waste Management Plan shall incorporate the following information:

1. Population information and projections for 20 years of population growth and development patterns 2-4 to 2-6
2. Urban concentrations, geographic conditions, economic growth and development, transportation conditions, and related factors 2-1 to 2-7
3. Estimates of solid waste generation from households, commercial institutions, industries and other types of sources, including the amounts reused, recycled, recovered as a resource, incinerated and landfilled. Estimates should identify special waste to include, at least, the following: stumps, land-clearing debris and construction wastes, motor vehicle tires, waste oil, batteries, sludges, mining wastes, septage, agricultural wastes and spill residues 2-12 to 2-14
4. A listing of existing and planned solid waste collection, storage, treatment, transportation, disposal and other management facilities, their projected capacities, expected life and systems for their use; markets for the reuse and recycling of materials Chapter 3
5. All milestones in the implementation of the solid waste management plan over the 20-year projection and the parties responsible for each milestone Chapter 7
6. A description of programs for solid waste reduction, reuse, recycling, resource recovery, incineration, storage, treatment, disposal and litter control 3-13
7. A description of outreach programs for waste exchange, public education and public participation 3-24, Chapter 4
8. The procedures for and results of evaluating solid waste collection, including transfer stations Chapter 3
9. The assessment of all current and predicted needs for solid waste management for a period of 20 years and a description of the action to be taken to meet those needs 3-10, 3-13, 3-33, 3-34

**CHAPTER 1.0
SOLID WASTE MANAGEMENT PLAN INTRODUCTION AND GOALS**

	PLAN PAGE
B. An integrated waste management strategy and consideration of the waste hierarchy	Chapter 4
C. A discussion as to how the Plan will be implemented	Chapter 7
D. Objectives for solid waste management within the District.....	Chapter 6
E. Definition of incremental stages of progress toward the objectives and schedule for their implementation	Chapter 7
F. Descriptions of the funding and resources necessary, including consideration of fees dedicated to future facility development	Chapter 8, Part II
G. Strategy for the provision of necessary funds and resources....	Chapter 8
H. Strategy for public education and information on source reduction, reuse, and recycling	3-24
I. Consideration of public and private sector partnerships and private sector participation in the Plan.....	Chapter 3
J. A description of how a minimum recycling rate of 25% of the municipal solid waste generated annually will be met or exceeded	3-23, 7-11
K. A description of the methodology for calculating the recycling rate.....	3-22
L. Documentation of all known solid waste disposal sites —closed, inactive, and active—within the District.....	3-14
M. Description of a methodology to monitor the amount of each type of solid waste generated within the District and a designated reporting agent	2-12, 7-2
N. Documentation of public participation efforts or opportunities in Plan development	9-2 to 9-6
O. Copies of Resolutions of Plan Approval from District members	1-4 to 1-11

Loudoun County, Virginia

www.loudoun.gov

Office of Solid Waste Management

906 Trailview Blvd., SE, Suite B, Leesburg, VA 20175

703/777-0187 • Fax 703/771-5523

October 1, 2003

Mr. Daniel Gwinner,
Environmental Engineer Senior
Division of Waste Program Coordination
Commonwealth of Virginia
Department of Environmental Quality
PO Box 10009
Richmond, Virginia 23240

RE: Submission of the 2003 Revised Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District

Dear Mr. Gwinner:

On behalf of the members of the Loudoun County Solid Waste Management Planning District (LCSWMPD), I am pleased to transmit the newly revised Loudoun County Solid Waste Management Plan (LCSWMP). The LCSWMP is the culmination of a year of work by the members of the LCSWMPD and addresses solid waste issues for the next 20 years. This document is intended to meet or exceed the requirements of the Virginia Solid Waste Management Act §10.1-1400 and the Virginia Solid Waste Management Planning Regulations (§9VAC 20-130-10).

The LCSWMPD members include the Incorporated Towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill, and the unincorporated areas of Loudoun County. The members formed an ad hoc committee that met from September 2002 through February 2003. All meetings were open to the public and were advertised. Upon completion of the Committee work, the Loudoun County Board of Supervisors held a Public Hearing on behalf of the entire District on April 8, 2003. Following adoption by the Board of Supervisors, the respective Town Councils of the seven Towns adopted the Plan.

The LCSWMP represents a significant milestone in cooperation between the County and the Towns. For the first time, all seven Towns and the unincorporated portion of the County have joined in a single solid waste management planning district. The LCSWMPD members request an expeditious review of the submitted plan by DEQ staff.

The point of contact for this plan is:

Richard S. Weber, Director
Office of Solid Waste Management
County of Loudoun
1 Harrison Street. SE
P.O. Box 7000
Leesburg, Virginia 20177
703-777-0161
rweber@loudoun.gov

Should you have any questions regarding the Plan or require further information, please contact me at your convenience.

Sincerely,



Richard S. Weber
Director, Office of Solid Waste Management

Enclosure: Adopted Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District

cc: Kirby M. Bowers, County Administrator, Loudoun County
John Wells, Deputy County Administrator, Loudoun County
The Honorable Keith Reasoner, Mayor, Town of Hamilton
The Honorable Steve Morgart, Mayor, Town of Hillsboro
Tom Mason, Director of Engineering and Public Works, Town of Leesburg
The Honorable Elaine Walker, Mayor, Town of Lovettsville
Mike Casey, Town Administrator, Town of Middleburg
Martin Kloeden, Assistant to the Town Manager, Town of Purcellville
Kelly Yost, Town Administrator, Town of Round Hill



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

Mailing address: P.O. Box 10009, Richmond, Virginia 23240

Fax (804) 698-4500 TDD (804) 698-4021

www.deq.state.va.us

W. Tayloe Murphy, Jr.
Secretary of Natural Resources

Robert G. Burnley
Director

(804) 698-4000
1-800-592-5482

April 21, 2004

Mr. Richard S. Weber, Director
Office of Solid Waste Management
Loudoun County
906 Trailview Blvd., SE, Suite B
Leesburg, VA 20175

Re: 2003 Solid Waste Management Plan for the Loudoun County Solid Waste
Management Planning District

Dear Mr. Weber:

I am pleased to inform you that the 2003 Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District (Planning District) received in this office on October 2, 2003, and with the revisions dated February 24, 2004, is hereby approved, subject to conditions regarding the statutory 25% recycling rate, as described below. The Planning District includes the County of Loudoun and the incorporated Towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill.

Once again, I commend you and your staff for this effort. This is the first plan receiving approval or conditional approval under the 2001 amendment to the Regulations for Solid Waste Management Planning, 9 VAC 20-130.

The Planning District's response to the items in the comment letter of January 30, 2004, adequately resolve all issues, with the exception of the mandatory minimum recycling rate. It is requested that these changes be incorporated into the plan as per your letter. Two copies of the corrections would be appreciated.

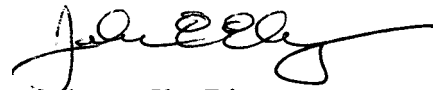
Mr. Richard S. Weber
April 21, 2004
Page 2 of 2

Va. Code § 10.1-1411 states that "Local and regional solid waste planning units shall maintain a minimum twenty-five percent recycling rate." The Planning Regulations repeats this requirement at 9 VAC 20-130-120 B and states that the plan shall describe how this rate shall be met or exceeded. Both the statute and regulation allow for variances or exemptions from the minimum recycling rates when marked conditions beyond the control of the locality or region make such mandatory rates unreasonable. See Va. Code § 10.1-1411 and 9 VAC 20-130-230 B 4.

I note that in the response letter of February 24, 2004, the Planning District details the steps that it is taking to meet the recycling rate. These steps include the development of a recycling transfer depot at the County Solid Waste Management facility and a Drop-off Center in the Hamilton-Purcellville area, among other items. It is understood that implementation of the plan will take time to be fully effective. Therefore, approval of the plan is conditional on implementing the measures as outlined in your letter, and receiving supplemental reporting every six months on progress toward achieving the 25% recycling rate. Should it appear that the Planning District cannot meet its recycling rate for CY 2004, the Department will revisit the conditional approval of the plan.

Thank you again for your efforts and cooperation in this matter. If you have questions about this letter, please contact Daniel S. Gwinner at (804) 698-4218 or me at (804) 698-4249.

Sincerely,



John E. Ely, Director
Office of Waste Programs
Waste Division

C: Richard C. Doucette
G. Stephen Coe
Sanjay V. Thirunagari
Daniel S. Gwinner

CHAPTER 2.0 WASTE CHARACTERIZATION AND QUANTITIES

2.0 WASTE CHARACTERIZATION AND QUANTITIES

Population growth and the associated residential and commercial development inevitably lead to greater waste generation and increased demand for services. In Loudoun County, the Solid Waste Management Plan will identify the current waste management system and needs; in the face of projected continued growth, the Plan will also prepare for future demand for services and management needs.

2.1 Description of Plan Area

The Loudoun County Solid Waste Management Planning District (LCSWMPD) includes the unincorporated areas of the County and all seven incorporated towns: Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill. The surface area of Loudoun County and its towns is 517 square miles.

Loudoun County is located in the Washington, DC-MD-VA-WV Primary Metropolitan Statistical Area (PMSA). The County is bordered by the Potomac River to the north; Clarke County, VA, and Jefferson County, WV, to the west; Fauquier County, VA, and Prince William County, VA, to the south; and, Fairfax County, VA, to the east. The eastern Loudoun County line is approximately 30 road miles from the District of Columbia. Leesburg, the County seat, is located 12 miles west of the border between Loudoun and Fairfax Counties near the geographic center of the County. Dulles International Airport lies along the Loudoun/Fairfax line. In 2002, 60.5% of Loudoun's land area was defined as agricultural, 23.9% was residential, 6.3% was commercial/industrial and 9.3% was public open space.¹ **Figure 2-1** is a location map showing Loudoun County's geographic location in the Washington DC-MD-VA-WV PMSA.

The following information on transportation, jobs, housing and urban concentration provides a profile of Loudoun's changing role in the greater metropolitan Washington DC region. The information also describes Loudoun's internal profile and sets the stage for the challenges of planning for and providing a solid waste management system that meets the needs of the second fastest growing county in the United States.

2.1.1 Transportation

Loudoun's major transportation routes include U.S. Highways 15 and 50; Virginia Routes 7, 9, and 28; and, the Dulles Toll Road and Greenway (VA 267). Commuter and freight railway services are available in nearby Brunswick and Point-of-Rocks, MD, by the Baltimore and Ohio Railroad and the Maryland Rail Commuter Service (MARC). Loudoun County is the location of Washington

¹ Loudoun County Department of Economic Development. (April 2002). *Summary Facts*. p.1.

CHAPTER 2.0

WASTE CHARACTERIZATION AND QUANTITIES

Dulles International Airport, now one of the fastest growing passenger airports in the United States.

Loudoun's transportation system is an interesting mix of highly sophisticated and internationally accessible air service from Dulles Airport to a system of Federal and State highways that must handle more traffic than their design ever anticipated. At the same time, Loudoun has more miles of unpaved road than any other county in Virginia. Each of these features symbolize a different set of solid waste management challenges to a County that has changed in twenty years from a rural agrarian county to a bustling international center of residential and commercial growth.

Dulles Airport and its activity symbolize a rapidly urbanizing population and commercial center just west of the nation's capital. Routes 7, 9, 28, and 15 and 50 have increased the County's accessibility for commuters and attractiveness for business. Routes 15 and Route 7 are north-south and east-west routes, respectively. These busy corridors also serve as the routing for some portion of the estimated 8 million tons of solid waste that is being imported annually into Virginia for disposal in large landfills in the Southeastern portion of the State. The County's rural road system represents the challenge of providing solid waste collection and transportation services to the areas west of Route 15 where there are unpaved roads and bridges with width and weight limits that cannot accommodate a modern trash compacting vehicle.

2.1.2 Jobs

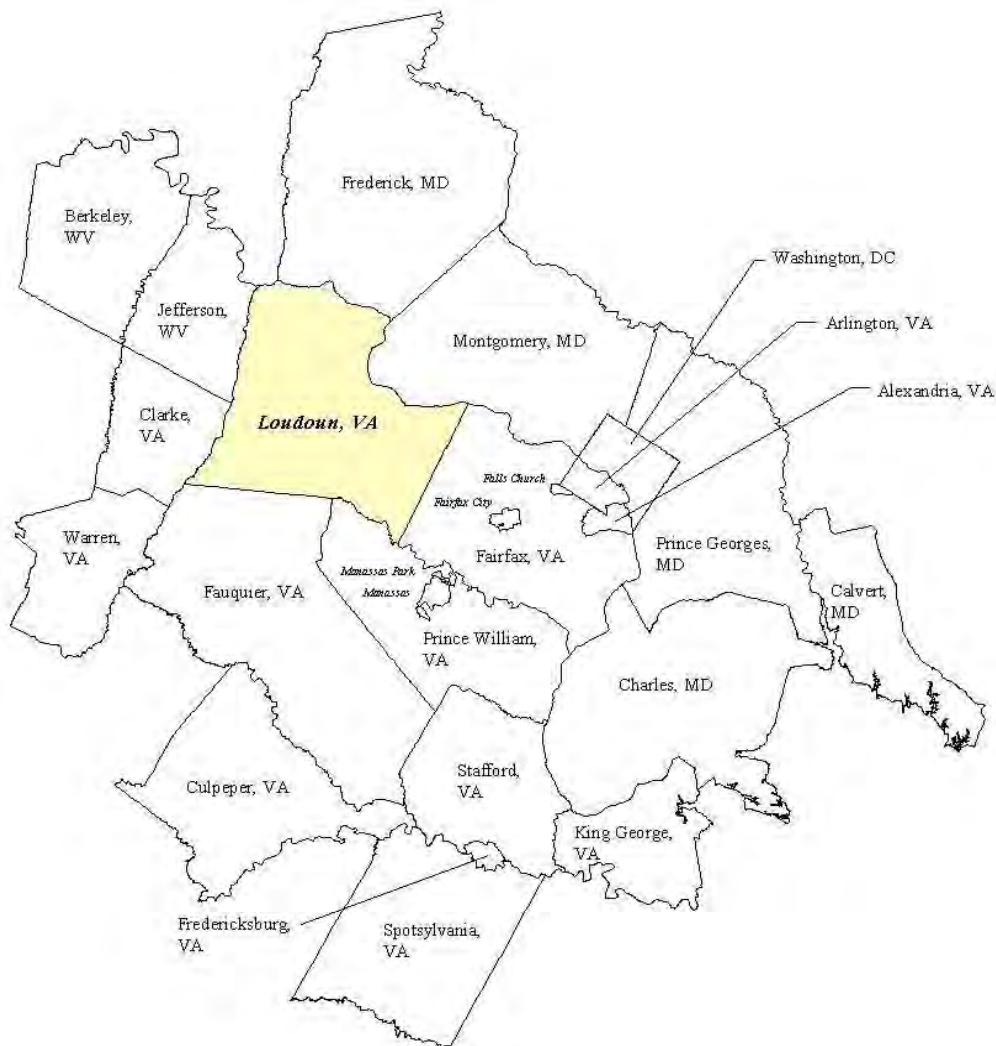
The number of jobs in Loudoun more than doubled in the past 10 years, increasing from 39,861 in 1991 to 97,200 in 2001.² Much of the recent economic development activity in the County can be attributed to a strategic position within the Washington DC Metropolitan Region and proximity to Washington Dulles International Airport. As a result of Loudoun's unique combination of assets, at-place employment is expected to continue to grow over the next 20 years reaching almost 200,000 jobs by 2020. With the growth of jobs comes burgeoning population, and market demand for both residential and nonresidential development is expected to continue.³

² Loudoun County Department of Economic Development. *2001 Annual Growth Summary*. p. 8.

³ Loudoun County. *2001 Revised General Plan*. p. 2-3.

CHAPTER 2.0 WASTE CHARACTERIZATION AND QUANTITIES

Figure 2-1: Washington DC-MD-VA-WV PMSA, Loudoun County



Source: Loudoun County Department of Economic Development

2.1.3 Housing

Over the last 50 years, the number of housing units in Loudoun County has increased by almost 1,000 percent. In 1950, there were 5,988 units in the County; in 2000, there were over 60,000 units. The greatest increase occurred since 1990, when nearly half of the County's housing stock was built. During the 1990s, one in four building permits issued in Northern Virginia was issued in Loudoun County. The number issued in Loudoun County during the last decade (39,270 permits) was surpassed only by Fairfax County.⁴

⁴ Loudoun County. 2001 Revised General Plan. p. 2-2.

CHAPTER 2.0

WASTE CHARACTERIZATION AND QUANTITIES

2.1.4 Urban Concentration

There is a clear delineation between the western and eastern portions of Loudoun County. The region west of Route 15 is primarily a traditional rural area featuring farmland and six of the seven incorporated towns. The seventh town, Leesburg, lies at the intersection of Routes 7 and 15, near the center of the County. East of Route 15, an urban/suburban assortment of residential subdivisions and commercial development dominates the landscape. The growth and near build-out of the technology industrial corridor in the Reston, VA area and along the Dulles corridor in Fairfax County have facilitated rapid business growth along the Route 28 corridor, which runs south from Route 7 in Loudoun to Centerville in Fairfax County.

The County's *2001 Revised General Plan* identifies and plans for these eastern portions of the LCSWMPD as the "Suburban Policy Area," the area that will experience the highest rates of growth for the next several years. The distinctions between Eastern Loudoun, Western Loudoun, and the incorporated towns are significant because they identify geographically the various levels of solid waste services that are available to District residents, with densely populated areas having higher levels of solid waste service available. In general, residents in Eastern Loudoun receive curbside pick-up and recycling from major solid waste collectors⁵ via contracts made individually or by homeowners' associations (HOAs) or property management companies. Residents of rural Western Loudoun contract with minor solid waste collectors⁶--if available--but often no service is available due to the higher costs associated with rural collection. Within the seven incorporated towns, residents receive service through contracts between the towns and the collectors.

2.2 Population Data and Projections

2.2.1 Population

Three events occurred in the 1960's that changed Loudoun's future to make it now the second fastest growing county in the United States:

- a) Population growth in neighboring Fairfax County;
- b) Construction of the Broad Run Interceptor that would provide sewer service for suburban development in the eastern part of the LCSWMPD; and,
- c) Construction of Washington Dulles International Airport.⁷

Loudoun County's population was 20,000 to 25,000 persons until 1960. During the 1960s, and in each decade that followed, the County's population rose by at

⁵ Loudoun County Codified Ordinances, Chapter 1084.02 (27). Defines major collectors as those that operate four or more collection vehicles and/or collect more than 2,000 tons of solid waste per year.

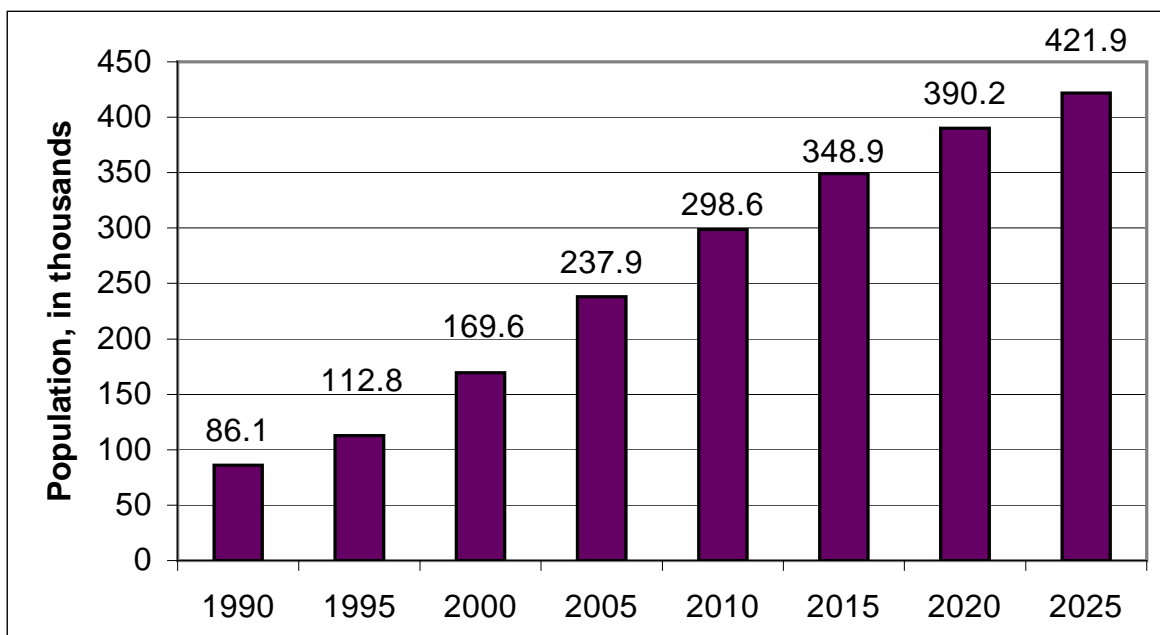
⁶ Ibid. Defines minor collectors as those that operate three or fewer collection vehicles and collect 2,000 tons or less of solid waste per year.

⁷ Loudoun County. *2001 Revised General Plan*. p. 2-1.

CHAPTER 2.0 WASTE CHARACTERIZATION AND QUANTITIES

least 50 percent. A population explosion from 24,549 persons in 1960 to 86,129 persons in 1990 amounted to a 250 percent increase in thirty years. By 2000, Loudoun's population had nearly doubled again to 169,599.⁸ This rapid population growth and number of households will be discussed as indicators that affect solid waste generation. **Figure 2-2** shows population figures and projections for Loudoun County.

Figure 2-2: Population, 1990-2025, in thousands of people



U.S. Census provided 1990 and 2000 figures.

Loudoun County Department of Economic Development provided baseline planning estimates for 1995 and 2005-2025.

Other demographic changes occurred between 1990 and 2000. Loudoun's median age increased from 31.5 years to 33.6 years and the average household income grew from \$72,433 to \$97,987. In both cases, these increases were at lower rates than the Northern Virginia and Washington Metro Areas. This may reflect the high percentage of young children in the District and an increase in family size. For 2001, the working-aged sector of the population, aged 25-64 years, represented the largest age cohort in Loudoun County (nearly 59 percent). Loudoun County's average household income is one of the highest in Virginia; however, the County has a relatively lower per capita income, which reflects the large number of households with children.⁹ School-age children comprised the second-largest cohort in 2000--nearly 31% of the population.

⁸ Loudoun County. *2001 Revised General Plan*. p. 2-2.

⁹ Loudoun County Department of Economic Development. *2001 Annual Growth Summary*. p. 20.

CHAPTER 2.0

WASTE CHARACTERIZATION AND QUANTITIES

Loudoun's share of the Northern Virginia regional population increased from 5 percent in 1990 to 8 percent in 2000. Population is an important factor in Solid Waste Management planning, as it is population that determines largely the types and amounts of solid waste that will be generated. Generally, as populations increase and become more urban, waste generation rates per capita increase due to both more affluence and smaller parcel sizes. Two other growth indicators that will be used to calculate waste generation are the number of automobiles registered and the number of acres of forested land cleared each year. Cars generate special automotive wastes such as tires, batteries, antifreeze, and waste oil. Landclearing for development generates debris that must be handled either as a commodity or as solid waste.

Table 2-1 shows the growth in each of these five factors (population, households, employment, automobiles registered, and acres of land cleared) from 1990 – 2025.

Table 2-1: Population, Households, Employment, Automobiles, and Landclearing, in thousands

	1990 ¹	1995	2000 ²	2005 ³	2010	2015	2020	2025
Population	86.1	112.8 ⁴	169.6	237.9	298.6	348.9	390.2	421.9
Households	30.5	40.3 ⁵	59.9	84.3	105.8	123.6	138.2	149.4
Employment	50.5	67.3 ⁶	87.0	126.2	165.6	206.0	248.4	294.7
Automobiles Registered	81.1 ⁷	107.3 ⁸	150.1 ⁹	210.7 ¹⁰	264.5	309.0	345.6	373.6
Acres of Land Cleared	Information not available at this time							

1. Loudoun County Department of Economic Development. *2001 Annual Growth Summary*. p. 6.

2. Ibid. p. 5.

3. Loudoun County Department of Economic Development. *Population Projection for 2005*.

4. Loudoun County Department of Economic Development. op. cit. p. 15.

5. Loudoun County Department of Economic Development. loc. cit. Planning projection of 2.8 people per household.

6. Loudoun County Department of Economic Development. op. cit. p. 21.

7. Loudoun County Commissioner of Revenue. 1995 actual rate of 2.66 cars per household.

8. Ibid. Actual number of cars registered as of July 1, 1995.

9. Ibid. Actual number of cars registered as of July 1, 2000.

10. Ibid. Estimate based on 2000 actual rate of 2.51 cars per household.

2.2.2 Households

The number of households is used to calculate waste generation, particularly domestic yard waste generation. The average household size in the District declined from 3.94 in 1950 to 2.80 in 1990, but recent data suggest a shift toward larger households. In 2000, the overall household size was 2.82. Households in

CHAPTER 2.0

WASTE CHARACTERIZATION AND QUANTITIES

single-family detached homes averaged 3.1 persons, households in townhouses averaged 2.8 persons, and those in multifamily units averaged 2.0 persons.¹⁰

2.2.3 Employment

From 1990 to 2000, the District's share of employment in Northern Virginia increased from 4.6 percent to 8.5 percent - an increase of more than 85 percent. In 2000, Fairfax County accounted for more than 50 percent of all jobs in Northern Virginia, Arlington County accounted for more than 15 percent, and Alexandria accounted for nearly 9 percent. Through 2020, Loudoun County is projected to experience the fastest job growth in Northern Virginia. An estimated 45 percent of the region's employed are in skilled "white collar" managerial, administrative, executive and professional occupations, reflecting the strong government, technology and business service sector base of the region.¹¹ In terms of solid waste management, high incomes result in increased consumption of consumer goods and waste generation.¹²

Table 2-2 shows 2001 employment in Loudoun County by industry classification.

Table 2-2: At Place Employment in Loudoun by Major Industry Classification and Number of Employees (2001)

Industry Classification	Number
Agriculture	2,418
Mining	198
Construction	9,983
Manufacturing	4,359
Transportation, Communications, Public Utilities	14,711
Wholesale Trade	3,072
Retail Trade	16,158
Finance, Insurance, Real Estate	2,561
Services	29,983
Government (State, Local, and Federal, combined)	13,757
Total	97,200

Source: Loudoun County Department of Economic Development. *2001 Annual Growth Summary*.

The types and number of jobs in a locality affects solid waste generation. For purposes of the current solid waste planning process, employment is an indicator of solid waste generation as at-place employment for the County is a variable used often in economic development and planning for a growth indicator.

¹⁰ Loudoun County, *2001 Revised General Plan*. p. 2-3.

¹¹ Loudoun County Department of Economic Development. *2001 Annual Growth Summary*. p. 9.

¹² Northern Virginia Planning District Commission. (September 1998). *1998 Northern Virginia Solid Waste Status Report*. p. 7.

CHAPTER 2.0 WASTE CHARACTERIZATION AND QUANTITIES

2.2.4 Automobiles

Automobiles are an integral part of life in suburban and rural areas. The number of automobiles operating is an important waste generation indicator because it is tracked by the Commissioner of Revenue and because the wastes generated from car maintenance require special handling so they do not pollute the environment. Between 1995 and 2000, the number of cars per household declined slightly in the LCSWMPD, although the total number of cars registered increased.¹³ This could reflect the increase in population coupled with an increase in the average family size. **Table 2-3** illustrates waste generation associated with car maintenance.

Table 2-3: Automobile Waste Generation Projections, in thousands

Waste	1990	1995	2000	2005	2010	2015	2020	2025
Waste Tires ¹	86.1	112.8	169.6	237.9	298.6	348.9	390.2	421.9
Waste Antifreeze ²	36.5	48.3	67.5	94.8	119.0	139.1	155.5	168.1
Waste Oil ³	288.7	382.1	534.3	749.9	941.7	1,100.2	1,230.4	1,329.8
Waste Oil Filters ⁴	288.7	382.1	534.3	749.9	941.7	1,100.2	1,230.4	1,329.8

1. 1000's of tires; estimate based on 1 tire per resident, per year, provided by Allan Lassiter, Waste Tire Program Manager, VA DEQ.
2. 1000's of gallons of antifreeze; usage estimate based on 1.8 gallons per vehicle every 4 years. VA Used Oil, Filter, and Antifreeze Consumer Management Study (UOFACMS); NVRC, Oct 4, 1999.
3. 1000's of gallons of waste oil; estimate based on 3.56 gallons per vehicle, per year, from American Petroleum Institute Study Model (1993) and UOFACMS.
4. 1000's of oil filters; annual use estimate based on 1 oil filter change per gallon of oil used, (UOFACMS).

2.2.5 Landclearing

Landclearing activity is both an indicator and a result of the exponential growth in the District. It is estimated that 3,000 acres of forestland are cleared per year for land development.¹⁴ An acre of woodland cleared for development creates approximately 150 tons of debris waste.¹⁵ Much of this waste is hauled and disposed of by the landclearing company. There is no information available on the degree to which this landclearing waste is reduced by removal of saw timber or firewood, or by burning on site. Therefore, the maximum estimated generation rate is used.

¹³ Refer to Table 2-1, page 2-6.

¹⁴ Dana Malone, Loudoun County Department of Building and Development.

¹⁵ Tim Hutchinson, Loudoun Composting, LLC, and Rick Hurwitt, William A. Hazel, Inc. An acre of woodland generates 600 cubic yards (CY) of mulch and wood chips. The EPA uses a standard weight for these wastes of 500 lbs. per CY.

CHAPTER 2.0

WASTE CHARACTERIZATION AND QUANTITIES

2.3 Composition of Solid Waste Generated in Loudoun County

Solid waste is defined in the Virginia Solid Waste Management Regulations as “any discarded material” (9 VAC 20-80-140, A. The full definition is provided under Part III of the regulations.). A reliable description of the composition of the waste stream will help ensure a responsive solid waste management program. While detailed waste stream evaluations are desirable for use in solid waste planning, they are expensive and time consuming to complete, and often do not produce sufficient new information to justify their cost. The waste composition described here is based on the known waste handled in the County by private solid waste companies as reported according to County Ordinances, County solid waste operations and other nonresidential waste-generating activities.

There are eight different “waste types” generated in Loudoun County. The waste types are listed and then defined below:

1. Municipal Solid Waste (MSW)
2. Construction and Demolition Waste (C&D)
3. Vegetative Waste (VW) –includes yard waste and landclearing debris
4. Consumer Separated Recyclables
5. Waste Dirt
6. Hazardous Waste
7. Regulated Medical Waste (RMW)
8. Special Wastes

2.3.1 Municipal Solid Waste (MSW)

MSW is comprised of those wastes generated daily by residential, institutional, or commercial sources. Examples of MSW include household garbage, food waste, inorganic wastes, container packaging, durable and non-durable goods and agricultural wastes.

2.3.2 Construction and Demolition Waste (C&D)

C&D wastes are generated from the renovation, demolition or construction of homes, buildings or development activity. Examples of C&D waste include concrete, lumber, steel, wire, sheetrock/drywall, bricks, shingles, plaster, glass, metal and plastic construction materials.

2.3.3 Vegetative Waste (VW)

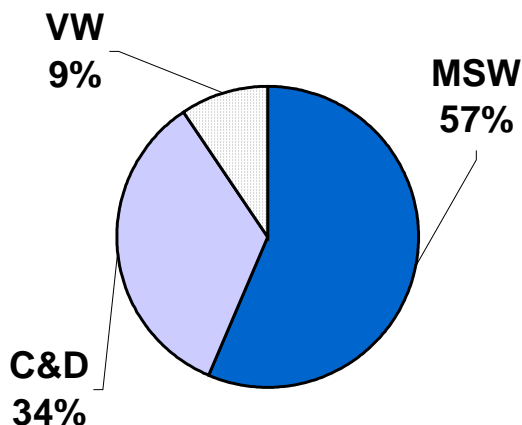
VW includes yard waste generated by lawn or yard care activities and debris generated from landclearing activities or operations. Examples of VW include decomposable materials such as leaves, grass trimmings, brush, wood chips, tree/shrub trimmings, stumps, logs and tree trunks.

CHAPTER 2.0

WASTE CHARACTERIZATION AND QUANTITIES

Figure 2-3 shows generation estimates of MSW, C&D, and VW for 2000.

Figure 2-3: MSW, C&D, and VW as proportions of their total in 2000



2.3.4 Consumer Separated Recyclables

Consumer separated recyclables are those materials separated for curbside collection or transported to recycling collection centers. Examples of recyclables include glass jars and bottles, plastic bottles, aluminum and steel food cans, newspapers, magazines, phone books, mixed office paper, cardboard, paperboard and appliances.

2.3.5 Waste Dirt

Waste dirt is generated in Loudoun County primarily from land clearing and development activities. The District does not have any historical volumetric information with respect to the generation of waste dirt. However, in recent years annual generation rates have steadily increased as a result of land development activities. This solid waste is typically high shrink swell clays and boulders that are not suitable for engineered fills. The waste dirt is often mixed with waste concrete and asphalt or woody materials. Waste dirt is included in this plan as a local solid waste management issue. The District does not intend to consider this material in calculating total waste generation or in the calculation of recycling rates.

2.3.6 Household Hazardous Waste (HHW)

Household hazardous wastes are those residentially generated products that may contribute to soil and water contamination if disposed of improperly. Examples of HHW include mercury thermometers, fluorescent light bulbs, degreasers and solvents, oil-based paints and varnishes, contaminated fuels, insecticide and pesticides.

CHAPTER 2.0

WASTE CHARACTERIZATION AND QUANTITIES

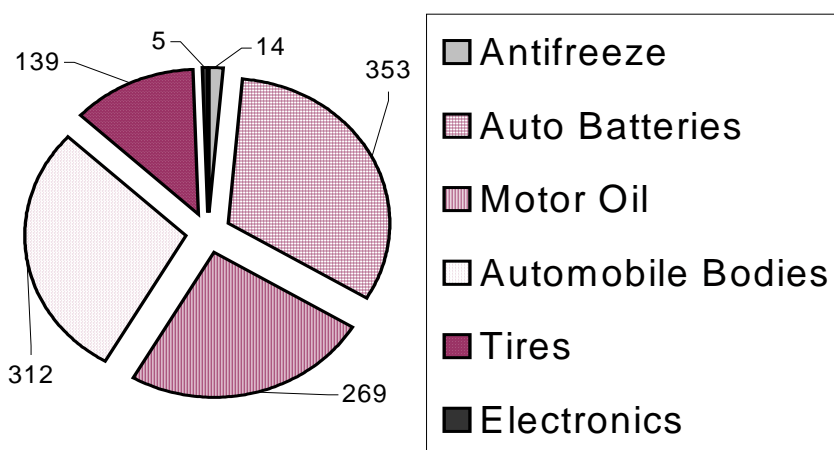
2.3.7 Regulated Medical Waste (RMW)

Regulated medical wastes are generated by hospitals, doctor and dentist offices, clinics and medical facilities. Examples of RMW include discarded vaccines, human blood and body fluids or items contaminated with these fluids, tissues, organs, body parts, needles and syringes (sharps). Regulated medical waste is a source of concern for proper handling, transport and disposal, but is beyond the scope of this Solid Waste Management Plan and is governed under specific State regulations for medical waste.

2.3.8 Special Wastes

Special wastes are those wastes that require special handling and precautions prior to disposal or recycling, and that may be included in the above waste types. Examples of special wastes include waste lumber, petroleum contaminated soils, oil filters, wet cell batteries, refrigerated appliances, asbestos, sludge, waste oil, antifreeze, electronic devices, and waste tires. **Figure 2-4** shows special wastes collected in the County for recycling and reported to the Virginia DEQ as part of the Commonwealth of Virginia Locality Recycling Rate Report for CY 2001 (VA DEQ Form 50-30). While all materials are not included, the report does show the variety of materials captured for reporting to the State. Revisions to the County's Solid Waste Ordinances in 2002 (Chapters 1084 [**Appendix E**] and 1086 [**Appendix F**]) are intended to provide more frequent reporting from the solid waste collectors in the County and hopefully improve the amount and accuracy of the information reported.

Figure 2-4: Special Wastes Collected in Loudoun County, Virginia in 2001 for Recycling – in Tons



Source: Commonwealth of Virginia Locality Recycling Rate Report, 2001

CHAPTER 2.0

WASTE CHARACTERIZATION AND QUANTITIES

Other special wastes that are generated in the County include sludge, septage, asbestos, spill residues, and agricultural wastes. Mining wastes are not generated in Loudoun County. Sludge, septage, asbestos, spill residues, and agricultural wastes are collected in Loudoun County for disposal primarily by specialized firms under contract to individuals, businesses, or government entities. The quantities of these wastes that generated in the County are unknown.

2.3.9 Hazardous Waste

Hazardous waste is a source of concern for proper handling, transport and disposal, but is beyond the scope of this Solid Waste Management Plan and is governed under specific State regulations for hazardous waste.

2.4 Solid Waste Generation Projections

LCSWMPD's solid waste generation rate depends on previously discussed factors of population, households, employment and other business, institutional, industrial, agricultural and manufacturing solid waste sources. Solid waste also includes special wastes such as automotive maintenance wastes, yard waste (brush, yard trimmings, leaves) from households, commercial landscaping, agricultural activities and landclearing for development.

2.4.1 Data Sources Used in Determining Waste Generation

Effective solid waste management planning requires methods for approximating the quantities of each waste type generated. Information available for identifying waste types and for estimating waste quantities in Loudoun County include:

- National per person estimates of MSW;
- National estimates for yard waste generation;
- Acres of woodland cleared for debris waste generation;
- National estimates for C&D waste generation;
- Annual reports from solid waste collectors permitted to operate in the District;
- Annual reports from solid waste facilities permitted to operate in the District;
- Regional solid waste management reports & jurisdictional comparisons; and,
- Annual compilations from the Office of Solid Waste Management for the County's Solid Waste Information and Assessment Program (VA DEQ Form 50-25) and the County's annual Commonwealth of Virginia Locality Recycling Rate Report.

Waste volume projections have been estimated on the following assumptions:

- Population is the best growth indicator, especially in one of the fastest growing jurisdictions in the country, and a good measure of waste generators in terms of volume and type of waste;

CHAPTER 2.0 WASTE CHARACTERIZATION AND QUANTITIES

- Number of households is a growth indicator that also affects waste generation rates over time;
- Employment numbers indicate commercial activity and affect waste generation;
- Special waste generation can be demonstrated by estimating waste generated from a base number such as number of automobiles for the various waste types of associated wastes;
- Rapid development in the County generates large quantities of additional waste such as C&D and landclearing debris.

In making long term waste generation projections, estimates were made for residential generators including population and number of households. Other growth and economic indicators have been used to project waste generation including employment, special wastes from the perspective of automobiles operating in the County, and acres of land cleared for development that can then generate estimates of certain debris waste. Factors for calculating estimates of waste generation rates are described below in **Table 2-4**.

Table 2-4: Calculating Waste Quantity Estimates

Waste Material	Calculation Based on
Municipal Solid Waste (MSW)	Actual District generation of 7.3 pounds per person per day
Construction and Demolition Waste (C&D)	EPA Estimate of 2.8 pounds per person per day
Vegetative Waste (VW) –yard waste	Estimate of 0.4 tons per household per year
Vegetative Waste (VW) –debris waste	3,000 Acres of woodland cleared per year and 150 tons of vegetative waste generated per acre
Consumer Separated Recyclables	Annual Solid Waste Collector Reports to County, County program and contracted service reports
Hazardous Waste	No estimate available
Household Hazardous Waste	County program and contracted services reports
Regulated Medical Waste	No estimate available
Special Wastes	Annual Solid Waste and Assessment Reporting to County, County special waste collection program, and contracted service reports

Quantifying solid waste can serve as a basis for important policy and financial decisions. Policy decisions can begin with a review of the solid waste system, how well the system is working for current and future conditions, and whether new or changed policies can affect the system. Financial decisions can be made

CHAPTER 2.0 WASTE CHARACTERIZATION AND QUANTITIES

based on waste estimates for planning and funding desired future solid waste management infrastructure, whether for more recycling, materials recovery and processing, waste transfer, or disposal.

Table 2-5 projects waste generation for the period 1990 to 2025. The twenty-year planning horizon in this Solid Waste Management Plan moves out to approximately 2025, so the projection provides a 35-year look at the County's solid waste generation rates. The year 1990 is used as a benchmark here for two reasons:

- 1) The decade between 1990-2000 represents a nearly 100% increase in the District's growth and consequently in the generation of solid waste within the District, and
- 2) The County had accurate numbers for waste generation in 1990 since all of the County's solid waste was handled by the County's Solid Waste Management Facility.

Table 2-5: Waste Generation for Loudoun County, 1990-2025, in thousands of tons per year

Type of Waste	1990	1995	2000	2005 ¹	2010	2015	2020	2025
MSW	68.8 ²	90.2 ³	142.3 ⁴	316.8 ⁵	397.8	464.8	519.9	562.1
C&D Waste	44.0 ⁶	57.7	86.7	121.6	152.6	178.3	199.4	215.6
Yard Waste	12.2 ⁷	16.1 ⁸	23.6 ⁹	28.1 ¹⁰	35.3	41.2	46.1	49.8
Debris Waste ¹¹	25	30	40	45	45	45	45	45
Total	150.0	194.0	292.5	433.4	537.6	615.6	682.2	733.9

1. Loudoun County Department of Economic Development. Waste generation figures for 2005-2025 is based on standard per-person and per-household multipliers and population projections.
2. Extrapolation based on trends.
3. Loudoun County. (1995). *Loudoun County Solid Waste Management Plan*.
4. Loudoun County. (2000). *Commonwealth of Virginia Locality Recycling Rate Report*.
5. Loudoun County. 7.3 pounds per person per day, based on actual reports from solid waste collectors and facilities in Loudoun County for CY2003.
6. U.S. EPA. (June 1998). 1990-2025: 2.8 pounds per person per day, from "Characterization of Building-related C&D in the U.S."
7. This number calculated by 0.4 tons per household, the effective rate in CY2000.
8. Ibid.
9. Loudoun County. loc. cit.
10. 2005-2025: one-third of a ton per household per year.
11. X acres multiplied by 150 tons of waste generated per acre

2.5 Solid Waste Management System Demand

An effective Solid Waste Management Plan must assess the County's current and future demand for solid waste management resources. Chapter 2

CHAPTER 2.0

WASTE CHARACTERIZATION AND QUANTITIES

demonstrates the demand for a solid waste system that can accommodate various types of waste and an increase of 53 % in waste tonnage (253 tons to 388 tons) from 2000 to 2005 and a 172 % increase in waste tonnage (253 tons to 689 tons) from 2000 to 2025.

Chapter 3 will describe the system required to manage these waste volumes and types. The system components include collection, transportation, transfer, and processing of solid waste as well as the diversion of solid waste for reuse and recycling for the major waste types of MSW, C&D, Yard, and Debris waste. Chapter 3 will also describe the components that are in place in the solid waste management system, the current and projected capacity of various components to handle the demand, and whether and when action should be taken to ensure the system's viability.

CHAPTER 3.0 SOLID WASTE MANAGEMENT SYSTEM

3.0 SOLID WASTE MANAGEMENT SYSTEM

3.1 Introduction

This chapter describes the programs and approaches currently in place to meet the solid waste management needs of the County. The system involves citizens, private entrepreneurs, and local government. The solid waste management system includes collection, processing, disposal, recycling, policy planning, environmental compliance and enforcement, and environmental monitoring.

3.2 Collection

For Calendar Year (CY) 2002 there were twenty-five solid waste collection and transportation firms permitted to operate in Loudoun County. A list of permitted waste collection companies in Loudoun County is provided in **Appendix G**. Of these, sixteen are considered "Minor" collectors operating 3 or fewer vehicles and transporting 2,000 tons or less of solid waste per year. Minor collectors serve the greater portion of rural the District. The remaining nine firms are considered "Major" collectors operating 4 or more collection vehicles and disposing of 2,000 tons or more of solid waste per year. These collectors primarily serve the urban and suburban areas of the District. All of the incorporated Towns and many of the larger residential communities contract with Major collectors for solid waste disposal services. In addition to those firms offering solid waste disposal services, there are an unknown number of companies collecting and disposing of construction and demolition waste (C&D) within the County. This group was not regulated under County ordinances prior to 2002.

3.2.1 Municipal Solid Waste Collection by the Private Sector

Loudoun County does not provide trash collection services to residences and businesses. Residents, businesses, property management companies, institutions, and homeowners' associations (HOAs) contract directly with private refuse collection companies.

Residents living in unincorporated portions of the District have several options for meeting their solid waste disposal needs. They can hire one of the many solid waste collection firms that operate in the County or a household may transport its trash to the local public sanitary landfill and pay the tipping fee. A household that is part of an HOA usually receives trash and recycling collection service as part of the HOAs community maintenance services, which are paid for by the resident in HOA fees or assessments.

Residents of multi-family housing units, including apartments and condominiums, typically receive refuse collection service utilizing dumpsters that are located in the complex by the property management company.

CHAPTER 3.0

SOLID WASTE MANAGEMENT SYSTEM

Businesses in the LCSWPD typically hire a private refuse collection firm to remove waste. Trash dumpsters are utilized by businesses for on-site storage of solid waste. These containers, which range generally from two to six cubic yards in volume, are placed in parking lots or specially designed enclosures. A single dumpster may serve one or more businesses. Stationary or portable trash compaction units are used by businesses with a high volume of waste but limited outside space for trash storage. In addition, several businesses and small industries also use their own company trucks to haul solid waste to the LCSWMF.

3.2.2 Role of the County in Collection

Loudoun County does not provide solid waste collection services to residents or businesses. The Loudoun County Public Schools provide solid waste collection services to schools and other public buildings. The County's primary role is to regulate the storage, collection, and transportation of solid waste and recyclables within the County.

Chapter 1082 (**Appendix H**) of the Codified Ordinances of Loudoun County, the "Loudoun County Solid Waste Storage Ordinance," regulates the types of collection containers used for storage of MSW and the frequency at which MSW will be collected. This ordinance is currently enforced and administered by the Loudoun County Department of Public Health and has been in place since 1992. This ordinance also ensures that activities associated with MSW storage are conducted in a manner that does not create a public nuisance, pollute the air, cause a discharge of pollutants to the waters of the County and, in general, impair the quality of the environment or create a hazard to the public.

Chapter 1084 of the Codified Ordinances of Loudoun County, the "Loudoun County Solid Waste Collection and Transportation Ordinance", regulates solid waste collection and transportation activities conducted within the County. Major revisions to Chapter 1084 were adopted in 2002. These revisions establish performance standards for collectors, identify specific materials to be collected for recycling, establish a compliance schedule for recycling and require all collectors to submit a quarterly solid waste collection report. A provision requiring all Major collectors to provide curbside recycling services to all customers outside the incorporated areas of the County was also part of the revision.

3.2.3 Role of the Towns in Collection

Residents of the seven incorporated Towns receive curbside trash and recycling collection services from private contractors who operate under contract to the Towns. Some of the Towns require contractors to provide special waste collection services. Town tax revenues pay for refuse collection.

CHAPTER 3.0 SOLID WASTE MANAGEMENT SYSTEM

Small businesses generating only one or two small containers of trash weekly may be included under Town contracts. Each Town has its own policy regarding whether to provide trash and recycling collection services for larger businesses.

Some of the Towns provide special waste pickup services through their solid waste services providers or their public works departments for large items that are too bulky for routine pickup (sofas, appliances, etc.). Most of the Towns collect solid waste from public works activities and transport this to the LCSWMF. These wastes include storm drainage waste, sludge, construction project wastes, and vegetative waste (VW).

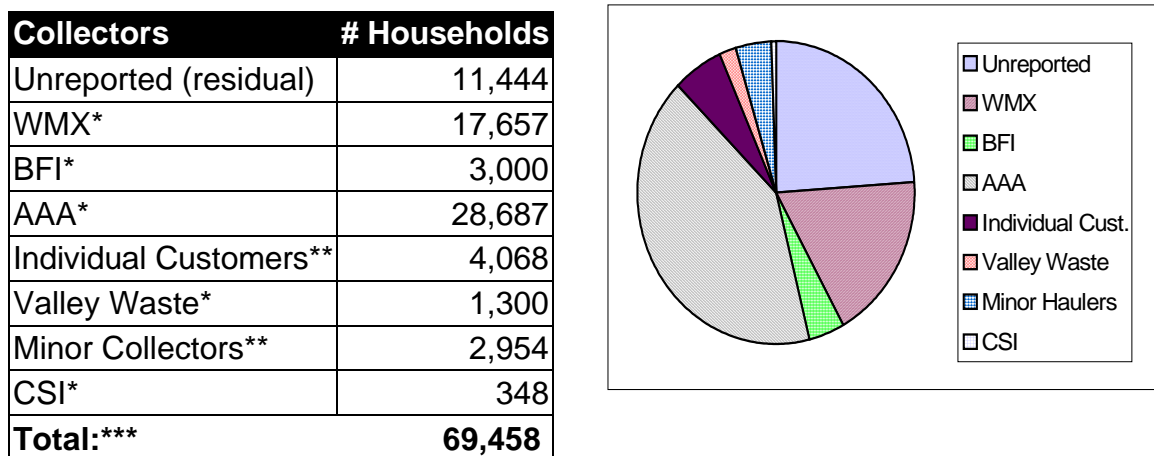
3.2.4 Individuals

Many residents transport their solid waste directly to the County SWMF. Residents typically transport MSW, small amounts of C&D waste, VW, source-separated recyclables, appliances and tires for processing, recycling, and disposal.

3.2.5 Distribution of Municipal Solid Waste Collection

Collection of MSW is distributed among major and minor collectors and individuals that transport their solid waste directly to the LCSWMF. **Figure 3-1** depicts the distribution of customers as households among collectors of residential MSW in the County. Based on reports submitted by collectors, approximately 11% of the households have no reported waste collection method or provider (based on an estimated 4,000 regular household users as individuals at the LCSWMF).

Figure 3-1: Distribution of MSW Collection



Sources:

*Reports submitted by Collectors for CY 2002 as required by the Codified Ordinances of Loudoun County, Chapter 1084.

**Loudoun County OSWM Solid Waste Activity Tracking (SWAT) reports.

***Total Households from Loudoun County Department of Economic Development. (April 2002).

CHAPTER 3.0

SOLID WASTE MANAGEMENT SYSTEM

3.2.6 Construction and Demolition Waste Collection

C&D collection services are provided by numerous private companies that supply roll-off containers. Containers are serviced when full or on a pre-arranged schedule. The contracted company picks up the roll-off and hauls it to a waste transfer station (WTS) located in the County or to one of several landfills located in nearby jurisdictions. C&D is also hauled by private companies in trucks or trailers directly to disposal facilities.

3.2.7 Vegetative Waste Collection

Residents of the District typically have their yard waste picked up by private refuse companies as part of the contracted solid waste or recycling collection services. This yard waste is taken by these private companies either to a WTS or to a yard waste composting facility in the District (**Appendix I**). A yard waste composting facility is a Vegetative Waste Management Facility (VWMF), which composts yard waste. Residents without trash collection services can take yard waste to the LCSWMF for recycling.

Businesses and institutions usually contract directly with a landscaping company for grounds maintenance services and any resulting yard waste is typically taken off site by that company. These landscaping companies typically dispose of VW in a roll-off located at the their place of business, which is later serviced by a private refuse company, or haul the VW directly to a solid waste management facility, such as the LCSWMF.

Companies generating VW as part of land-clearing operations usually directly haul or contract to haul the waste to a VWMF located in LCSWMPD (**Appendix I**) or Prince William County. Other options include hauling saw logs, chips, or mulch generated at the site of the land clearing directly to markets, many of which are located in southern Virginia and West Virginia.

3.2.8 Special Waste, Household Hazardous Waste, and Clean Waste Programs

Special wastes—such as waste motor oil and antifreeze, household hazardous waste (HHW), scrap tires, and automotive batteries—must receive special handling and are collected only by specialized contractors. These contractors are hired by individual businesses or entities.

Special waste collectors offer services transporting regulated medical waste, HHW, and waste oil, waste antifreeze, and wet cell batteries. These special waste collectors may be permitted by the Virginia Department of Environmental Quality (DEQ) and/or the Environmental Protection Agency (EPA). Members of the District do not require additional solid waste collection permits for these collectors. A list of known authorized collectors operating in Loudoun County is located in **Appendix G**.

CHAPTER 3.0

SOLID WASTE MANAGEMENT SYSTEM

Citizens of Loudoun County may bring special wastes to the LCSWMF and at other authorized locations. Various contractors are hired by Loudoun County to pick up special wastes from the LCSWMF and ensure that the materials are recycled or disposed of properly. The County contracts with specialized firms to conduct HHW collection events. Residents transport their HHW to collection sites where it is inventoried and prepared for shipment to an authorized disposal facility.

The drums or containers are loaded into a tractor-trailer for transport to an out-of-state Treatment/Storage/Disposal (TSD) facility. The Hazardous Waste Transporter must be registered with the Commonwealth and the EPA and meet the applicable requirements. The transporter must comply with DOT regulations for transportation of hazardous materials under 49 CFR part 172, subpart F and placard the vehicle. The collected HHW must be delivered to a TSD facility for off-loading within 3 days of the event. All operations at the TSD must be in accordance with Federal and State laws.

3.2.9 Industrial Waste Collection

The majority of waste generated in industrial offices and warehouses is similar to household refuse in composition and is handled as MSW. A small amount of industrial waste is created that may require special handling and disposal. Such wastes receive proper treatment and disposal by specialized contractors who collect and dispose of the waste outside of the District.

3.3 Waste Disposal, Transfer and Processing

3.3.1 Private Sector Disposal, Transfer, and Processing

A system of both public and private facilities has developed to manage the solid waste generated in the County. Currently, there are 5 privately owned solid waste management facilities permitted to operate in Loudoun County. These facilities accept a variety of materials for disposal and can be grouped into one of four types: 1) Waste Transfer Stations (WTS); 2) Materials Recovery Facilities (MRF); 3) Vegetative Waste Facilities (VWMF); and 4) Yard Waste Composting Facilities. None of these facilities are technically disposal facilities. However, they collect and transport materials or wastes for disposal and/or recycling in other jurisdictions. **Appendix I** lists the privately owned solid waste management facilities in Loudoun County.

3.3.1.1 MSW and C&D Processing

There are three privately owned solid waste management facilities in the District permitted to manage MSW and/or C&D. These private facilities include a MSW/C&D transfer station, a C&D transfer station, and a C&D MRF. **Appendix I** provides descriptive information about these, as well as other solid waste management facilities that are permitted to operate in Loudoun County.

CHAPTER 3.0 SOLID WASTE MANAGEMENT SYSTEM

There are two WTSs in LCSWMPD. These facilities accept a variety of materials including MSW, C&D, or source-separated recyclable materials for disposal off-site. One of these facilities is located in Leesburg, Virginia and the other is in Sterling, Virginia.

Currently, one MRF is permitted to operate in the District. This facility is located in Sterling. This facility accepts C&D waste and source-separated recyclables for resale on the open market. An additional MRF may be permitted in the Chantilly area of LCSWMPD in 2003-2004.

The County currently has permitted one facility to handle 600 tons per day of MSW and has permitted two WTSs for a combined total of 770 tons per day of C&D. Applications for an additional capacity of 960 tons per day of C&D are pending and another application for 750+ tons per day of C&D is anticipated in 2003. Therefore, if all requests are approved as described by the date of adoption of this plan, the County will have 600 tons per day of MSW transfer facility capacity and 2,332 tons per day of C&D transfer facility capacity in the private sector. Transfer capacity is dependent on the availability of an economically viable receiving disposal facility.

A significant amount of the MSW generated in the District is hauled by larger private refuse companies. A large amount of this waste goes to WTSs and Waste-to-Energy (WTE) facilities located in Fairfax County and a minor amount goes to WTSs in the City of Manassas. The majority of MSW generated in the District is taken directly to the privately owned WTS located in the County, where the waste is transferred to long-haul vehicles for transport to one of several different regional disposal facilities. **Table 3-1** is a list of these regional solid waste disposal facilities.

A large portion of the C&D generated in the District is hauled directly by private companies to solid waste disposal facilities located in nearby jurisdictions. A smaller portion of the C&D generated, largely what is collected in roll-off boxes, is hauled to the WTSs and MRFs located in the County. From these facilities, the waste is hauled to several different regional disposal facilities.

3.3.1.2 Vegetative Waste Processing

There are two VWMFs permitted in the District. Of these, only one facility accepts waste from outside sources. These facilities accept a variety of materials such as grass, leaves, stumps, brush and logs. The majority of this material is recycled into saleable products such as compost, mulch, wood chips and firewood. Both facilities are located in the southeast corner of Loudoun County near Chantilly.

3.3.1.3 Waste Dirt Processing

Land development activities in Loudoun County have resulted in the generation of an increasing amount of waste dirt. The need for a disposal location for this waste dirt has

CHAPTER 3.0

SOLID WASTE MANAGEMENT SYSTEM

led to the creation of businesses in the County that accept loads of waste dirt for a fee, which results in the accumulation of that dirt into large, unregulated surface piles. In addition, the incidents of unlawful dumping of waste dirt have increased in the County. In order to address the issue waste dirt, the Loudoun County Zoning Ordinance has been recently revised and now includes standards for surface stockpiles of soil. In addition, future amendments to Chapter 1080 (**Appendix J**) are anticipated in order to address the problem of unauthorized dumping of waste dirt throughout the County.

3.3.1.4 Special Waste Processing

There are a number of wastewater treatment plants in the County that generate sludge as a by-product, including publicly owned plants in the incorporated Towns, as well as a few privately owned plants. Sludge from the Town of Leesburg's and the Town of Round Hill's Water Pollution Control Facilities is converted into dry pellet fertilizer at Leesburg's permitted biosolids-processing facility. Stabilized, dewatered sludge from several treatment plants is disposed at the LCSWMF in accordance with its permit. In 2002, the County's landfill accepted 43 tons of non-hazardous sludge. Sludge generated in the County is also disposed by land application or discharged via interceptor for treatment at the Blue Plains Wastewater Treatment Plant in Washington, D.C.

Septage is disposed in the County under permit to the Loudoun County Sanitation Authority. Asbestos and spill residues are disposed outside of the County at facilities permitted to accept such wastes.

Agricultural wastes, including animal manure and bedding, pesticides and herbicides, and animal carcasses, are generated by the numerous farms in the rural western part of Loudoun County. Much of this waste is removed and disposed by private waste collectors under contract to individual farm owners. Animal manure is disposed of in the County by land application or picked up by one of several private companies that operate manure composting operations. In addition, manure and bedding from numerous horse farms in the County are collected and transported to Pennsylvania for use in mushroom production. Waste pesticides and herbicides may be brought to the County-sponsored Household Hazardous Waste and Clean Waste events. Animal carcasses are picked up by a private company and processed into fertilizer or may be disposed at the LCSWMF in accordance with its permit.

3.3.2 Role of the County

The County's role in disposal and processing is threefold:

- 1) to plan and ensure available disposal capacity to meet needs;
- 2) to operate a solid waste management facility as a public service; and,
- 3) to regulate other solid waste management facilities to ensure protection of public health, safety and the environment.

CHAPTER 3.0 SOLID WASTE MANAGEMENT SYSTEM

Table 3-1: Regional Solid Waste Disposal Facilities

Facility Name and Location	Type of Facility	Type of Waste Accepted	Ownership
Atlantic Waste Disposal Sussex County Waverly, Virginia	Sanitary Landfill	MSW; C&D	Privately owned and operated
I-95 Energy/Resource Recovery Facility Fairfax County Lorton, Virginia	Incinerator	MSW	Privately owned and operated
Fauquier County Landfill Fauquier County Warrenton, Virginia	Sanitary Landfill	MSW; C&D	Owned and operated by Fauquier County
Lorton Landfill/Furnace Road Debris Landfill Fairfax County Lorton, Virginia	C&D Landfill	C&D	Privately owned and operated
King George Landfill King George County King George, Virginia	Sanitary Landfill	MSW; C&D	Owned by King George County; Privately operated
Middle Peninsula Landfill Gloucester County Gloucester, Virginia	Sanitary Landfill	MSW; C&D	Privately owned and operated
Potomac Landfill Prince William County Dumfries, Virginia	C&D Landfill	C&D	Privately owned and operated

Notes: C&D = construction and demolition; MSW = municipal solid waste

CHAPTER 3.0 SOLID WASTE MANAGEMENT SYSTEM

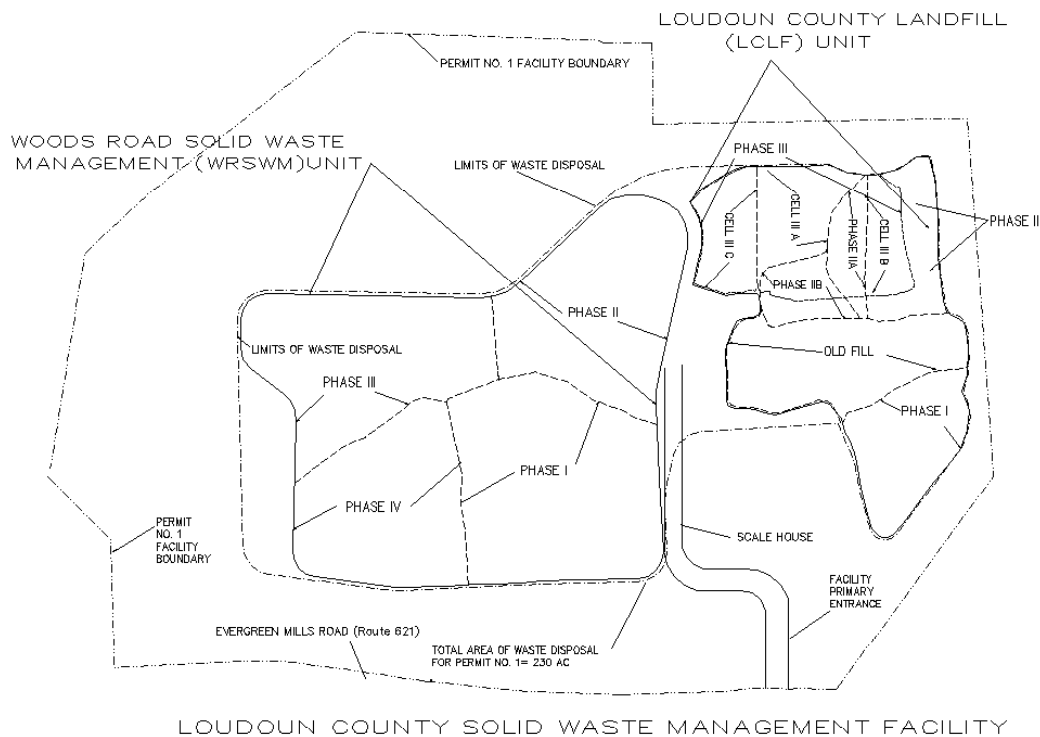
3.3.2.1 Loudoun County Solid Waste Management Facility (LCSWMF)

The LCSWMF is located four miles south of Leesburg, Virginia, on the west side of State Route 621 (20939 Evergreen Mills Road). Owned and operated by the Loudoun County government, this facility includes a sanitary landfill, a complete Recycling Dropoff Center (DOC), special recycling facilities, and a temporary HHW storage facility. The LCSWMF serves Loudoun County only, and is the only permitted disposal facility in the District. LCSWMF operates under the Board's Landfill policy as described in **Appendix K**. This facility accepts MSW, which is landfilled; C&D waste, which is landfilled or recycled; and, VW that is ground into mulch and recycled. Waste tires, scrap metal, appliances, waste oil, and waste antifreeze are collected and transported off-site for recycling.

3.3.2.2 Facility Capacity and Phasing Schedule

The facility is comprised of two discrete disposal units: the existing landfill unit (LCLF Unit) and the Woods Road Unit (WRSWM Unit). The disposal areas in the two units have been, or will be constructed, operated, and closed in a series of phases or cells. **Figure 3-2** shows the location of the two units and the phases within each of the units.

Figure 3-2: LCSWMF Location of Cells/Phases



Source: Solid Waste Services, LLC. (May 14, 2002). *Presumptive Remedy Proposal for the Loudoun County Solid Waste Management Facility*.

CHAPTER 3.0 SOLID WASTE MANAGEMENT SYSTEM

Current LCSWMF operations are conducted at the LCLF Unit which consists of six phases (Old Fill, Phase I, Phase II, Phase IIA, Phase IIB, and Phase III). This unit occupies a 71.7-acre waste disposal footprint. The construction details and disposal capacity are presented in **Table 3-2**. Several phases of the LCLF Unit overlap, and therefore, the sum of the actual acreage of the individual construction phases exceeds the area of the facility footprint. As of June 30, 2002, 308,900 cubic yards (CY) (70,000 to 85,000 tons of MSW) of constructed disposal capacity are available, and an additional 2,059,000 of permitted capacity is available upon construction.

The WRSWM Unit contains an additional 21.8 million CY of permitted design capacity. It will be developed as needed, in five phases, and has a design life of more than 50 years (**Table 3-2**). Actual design life will vary dependent upon actual gate receipts.

Approximately 40.3 of the 71.7 acres of the LCLF disposal unit have been closed and capped. Future cap and closure projects will occur as capacity is utilized. The scheduling of those projects is dependent on disposal demand. In the near term, closure projects are included in the construction of additional capacity (Cell IIIB Project).

Table 3-2: LCSWMF Capacity Summary

PHASE	BUILT	SIZE (acres)	ACTIVE	VOLUME (CY)	WEIGHT (tons)
CONSTRUCTED LCLF UNIT PHASES/CELLS					
LCLF Unit Old Fill	1971+	29.6	1971-1985	1,331,810	494,060
LCLF Unit Phase I	1984	11.8	1984-1991	600,000	225,000
LCLF Unit Phase II	1987	12.4	1987-1992	569,682	195,059
LCLF Unit Phase IIA/IIB	1992-1993	9.2	1992-2002	955,570	292,947
LCLF Unit Cell IIIA	2001	7.1	2002-2006	344,550	-
FUTURE LCLF UNIT PHASES/CELLS					
LCLF Unit Cell IIIB	2006	10.3	2005-2014	763,476	199,829
LCLF Unit Cell IIIC	2013	7.0	2014-2021	1,124,800	235,750
Facility Total (actual waste footprint)		71.7		5,689,888	1,714,526
FUTURE WRSWMF DISPOSAL UNIT PHASES/CELLS					
WR Unit Phase I	*	36.2	14 years	3,690,000	‡
WR Unit Phase II	*	29.8	8 years	3,290,000	‡
WR Unit Phase III	*	30.9	6 years	2,940,000	‡
WR Unit Phase IV	*	23.8	6 years	3,440,000	‡
WR Unit Phase V	*	0	11 years	8,420,000	‡
WR Unit Total	*	120.7	45+ years	21,780,000	‡

* Construction dependent on demand

‡ Weight buried dependent on volume and type of waste received daily

CHAPTER 3.0

SOLID WASTE MANAGEMENT SYSTEM

3.3.2.3 Regulation of Facilities

Chapter 1080 of the Codified Ordinances of Loudoun County, the “Solid Waste Management Facilities Ordinance”, regulates the construction, operation, and closure of solid waste management facilities in Loudoun County. The ordinance also prohibits the open dumping of solid waste. This ordinance was substantially revised in 1998 and 1999 to include permitting and monitoring requirements for VWMFs and yard waste composting facilities. Minor revisions adopted by the Board of Supervisors in 2000 included the elimination of the reduction in the solid waste setback distance for most types of solid waste management facilities and a limit on the permitted capacity for MSW at any one facility of not more than 600 tons a day (excluding the LCSWMF).

3.3.3 Summary of System Disposal Capacity

The waste processing and disposal roles of the private sector and the public sector have been described in prior sections of this chapter. This section describes the aggregate processing and disposal capacity of the solid waste management system. For the purposes of this chapter, capacity is described as follows:

MSW Transfer capacity refers to the daily throughput or the amount of waste that a facility can receive and process each business day. The facilities are not permitted to have waste on the floor at the end of the day.

C&D Transfer and/or MRF capacity is the maximum daily throughput, which is also the total amount of waste that may be stored in or on the facility.

Disposal capacity at landfills refers to the total permitted disposal volume based on an approved (permitted) design plan. The facility may not have all of that permitted capacity available if part of the facility has not been constructed. Disposal facilities also have a daily capacity that is a function of the logistics of customer transaction processing at the scales, waste screening capability, and equipment. These parameters can be adjusted in response to demand within the conditions of the permit for the facility.

VWMF capacity normally refers to the gross amount of material that can be stored/processed on-site consistent with facility permit requirements. Daily capacity is dependent on the amount of waste that a facility can take for initial processing (such as de-bagging or grinding).

The LCSWMF is designed and permitted to handle the safe disposal of solid waste generated in the County. The cumulative available (permitted, not constructed) capacity of the facility is 7 to 8 million tons of waste. The estimated amount of MSW and C&D generation through 2025 is approximately 10 million tons. Provided that the County maintains at least 25% recycling, there is adequate disposal capacity permitted to meet the County’s projected needs if permitted capacity is constructed.

CHAPTER 3.0 SOLID WASTE MANAGEMENT SYSTEM

The private sector facilities provide a buffer to this demand by outshipping waste to other facilities. This conserves capacity at the LCSWMF.

Figure 3-3 illustrates currently available MSW capacity plotted against demand, over time. The figure indicates that the County has adequate permitted capacity to address needs beyond 2010. Recycling has not been taken into account prior to 2005 and would reduce the disposal demand amounts by 10-20%.

Figure 3-3: MSW Facility Capacity

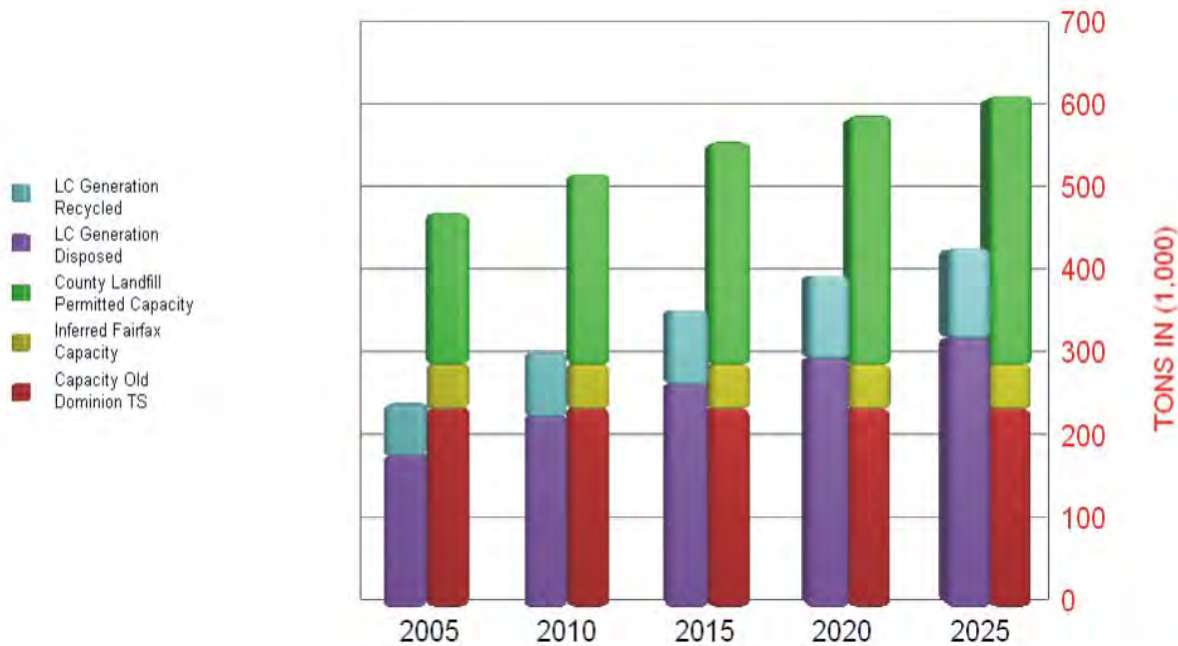


Figure 3-4 represents an assessment of C&D capacity based on current available capacity. The County has sufficient capacity permitted in C&D facilities to address generation in the County throughout the 20-year planning horizon provided that the capacity permitted is available to manage County-generated waste.

CHAPTER 3.0 SOLID WASTE MANAGEMENT SYSTEM

Figure 3-4: C&D Facility Capacity

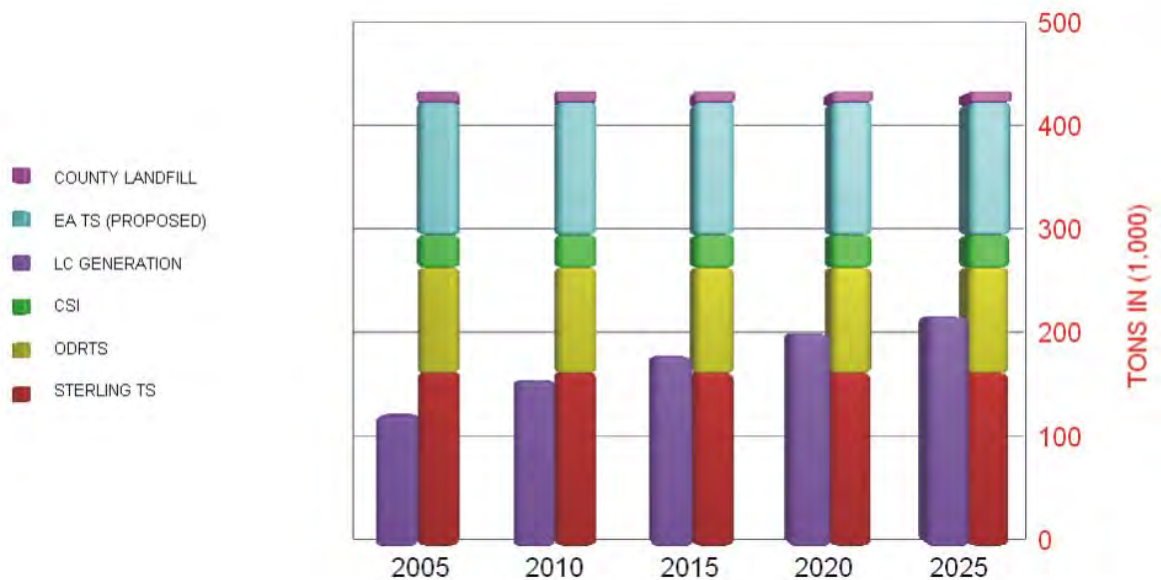
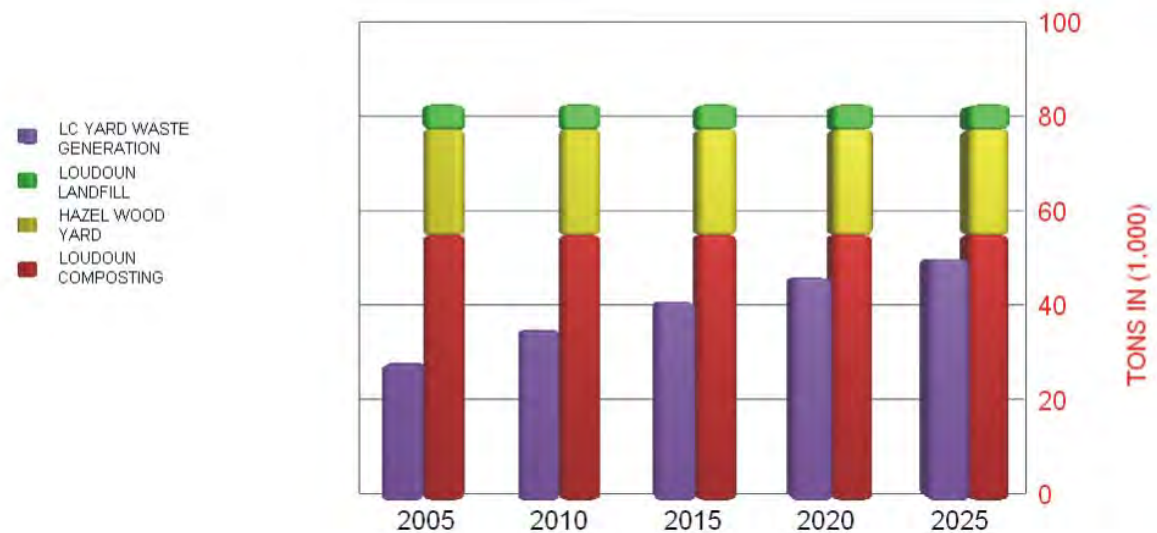


Figure 3-5 represents an assessment of VW processing capacity. While the County has permitted sufficient capacity to address generation for ten to twenty years, this capacity is not immediately available.

Figure 3-5: Vegetative Waste Capacity



CHAPTER 3.0

SOLID WASTE MANAGEMENT SYSTEM

3.3.4 Inventory of Known Disposal Sites

Section 9 VAC 20-130-120 of Virginia Solid Waste Management Regulations requires localities to maintain an inventory of known disposal sites in the locality. This inventory is maintained for the District by the Office of Solid Waste Management (**Appendix L**). Any disposal sites identified in the future will be added to the inventory. In addition to these disposal sites, OSWM maintains an inventory of dump complaints, investigations, corrective actions, and last known status. Many such complaints involve relatively small amounts of waste that do not warrant the site being included in the disposal site inventory.

3.4 Solid Waste Diversion and Recycling in Loudoun County

Title 10.1-1411 of the Code of Virginia requires that local solid waste management plans identify how the State's mandated recycling rates shall be achieved. The Code established initial recycling goals of 10% by 1991, 15% by 1993 and 25% by 1995. The Code was amended in 1995 to require the 25% rate through 1997 and again in 1997 to sustain a minimum 25% recycling in perpetuity.

9 VAC 20-130-10 *et seq.* sets forth requirements for comprehensive and integrated solid waste management plans that follow a solid waste hierarchy which places source reduction, reuse and recycling above energy recovery / incineration and landfilling. This section addresses solid waste diversion or the redirection of solid waste away from energy recovery / incineration and landfilling. The solid waste hierarchy is discussed in greater detail in Chapter 4.

3.4.1 Recycling Challenges

The District faces many challenges in working toward a system that follows the hierarchy. Loudoun County, as have other northern Virginia localities, has experienced a shift in the waste handling model that was established in the early 90's when grassroots recycling efforts became part of local and State government solid waste management planning. Discounted landfill disposal fees and excess capacity at the landfills in southeastern Virginia provide a disincentive for solid waste collectors to recycle. Vertical solid waste corporate structures maximize their cash flow by retaining as much of the waste captured as possible through a continuum of services from collection to transport to disposal.

3.4.2 Recycling - The Role of the County

The County's role in solid waste diversion and recycling is to:

- Ensure that the LCSWMPD meets the State's 25% recycling mandate;
- Provide residents and businesses an opportunity to recycle in compliance with the County's Recycling and Waste Reduction Ordinance; and,
- Offer recycling and proper options for recyclable or reusable materials.

CHAPTER 3.0

SOLID WASTE MANAGEMENT SYSTEM

Through contracted services, materials are collected from eight Recycling Dropoff Centers (DOCs) including operations at the LCSWMF, periodic HHW collection events, and two hazardous waste collection events for qualifying local businesses. The County's largest recycling DOC is at the LCSWMF and is the only one-stop site for collection of special wastes for recycling such as wet cell batteries, waste oil, and waste antifreeze. Additional opportunities to recycle waste tires and scrap metal are provided at the LCSWMF under a user fee schedule.

The County's Solid Waste Diversion and Recycling program also administers the Virginia Litter Prevention and Recycling Grant Program. The program receives and distributes funds from a special State tax to the seven incorporated Towns and other organizations with common goals for recycling and diversion education activities.

3.4.2.1. Recycling Compliance and Enforcement

Chapter 1084 of the County's ordinances requires refuse collectors to be permitted to operate in LCSWMPD. Revisions to Chapter 1084 occurred in 2002. Effective January 1, 2003, solid waste collectors permitted to operate in the County must provide recycling services if they are designated a "major" collector based on tonnage and number of vehicles.

Chapter 1086 of the County's ordinances requires residents as well as businesses to separate certain materials for recycling. Complaints from citizens and refuse collector reports required by Chapter 1086 suggested that materials separated for recycling, are not, in fact, being recycled and that the system was failing to provide satisfactory basic levels of service. The Board of Supervisors significantly revised Chapter 1086 in 2002. Key revisions to Chapter 1086 provide for:

- Materials to be collected for recycling;
- A compliance schedule for recycling;
- Businesses to recycle at least one principal recyclable material (PRM) from their waste stream;
- Owners/managers of apartments, commercial office buildings, strip malls or other businesses to provide a recycling system to tenants, employees and customers; and,
- All collectors to submit a quarterly report documenting total recyclable materials collected.

3.4.2.2. Loudoun County Recycling Policy

In 1992, the Board of Supervisors established a recycling policy. The policy is described in **Appendix M** as it was presented and reaffirmed in April 2001.

CHAPTER 3.0 SOLID WASTE MANAGEMENT SYSTEM

3.4.2.3. Recycling Dropoff Centers (DOC's)

Loudoun County operates eight DOCs for citizens who do not currently have curbside collection of recyclables. A private contractor services these DOCs with contract management services provided by the Office of Solid Waste Management (OSWM). A listing of the centers, their locations and materials that can be recycled is included in **Appendix N**.

Many residents rely on the County's recycling / diversion programs for recycling and proper disposal of hazardous materials. Accelerated population growth is putting increasing pressure on the DOCs to handle larger quantities of recyclable materials, contaminants, and large, bulky items left for pickup.

3.4.2.4. Household Hazardous Waste (HHW) Collection

The HHW collection program is conducted through a contract with a private company that has staff trained to identify, separate, package, store and transport the materials collected according to State and Federal waste and transportation laws and regulations.

The County operates the only HHW collection program in the County for County residents only. Collection events are held periodically throughout the year and are located throughout the District to serve all areas conveniently. Residents of the LCSWMPD can participate in any of the HHW collection events.

HHWs are common materials or products used in a household that may be toxic or hazardous if not disposed of properly. These materials are exempt from State and Federal hazardous waste laws when they are the result of household usage. The County's program is intended to divert these materials from improper disposal and to encourage removal of the materials from households when they can or will no longer be used.

Household Hazardous Waste: HHW includes cleaning products, oil-based paints and varnishes, unwanted fuels, insecticide and pesticides, hobby chemicals, cleaning products, and pool chemicals. HHWs are a subset of MSW.

Conditionally Exempt Small Quantity Generators (CESQG): CESQG are non-residential hazardous waste generators of no more than 100 kilograms per month (roughly 220 pounds or 25 gallons) of hazardous waste or less than 1 kilogram per month of acutely hazardous waste. They are subject to reduced management requirements under the Virginia Hazardous Waste Management Regulations (9 VAC 20-60-12 *et. seq.*). A CESQG can participate in the Loudoun County "Clean Waste Program" after certifying they qualify as a CESQG under the VHWMR. Certain County departments have qualified as CESQGs.

CHAPTER 3.0

SOLID WASTE MANAGEMENT SYSTEM

Household Hazardous Wastes and CESQGs: Loudoun County residents and CESQGs have access to household hazardous waste and CESQG hazardous waste collection programs throughout the year. Both programs must be operated in compliance with the Virginia Solid Waste Management Regulations, VHWMR, the Virginia Regulation Governing the Transportation of Hazardous Materials, and U.S. Department of Transportation Regulations for the Transportation of Hazardous Materials.

Under both programs, the participants deliver the waste to the collection site. The Contractor removes the waste from the participant's vehicle. The waste is identified and characterized according to VHWMR. Hazardous wastes are packaged and labeled in accordance with the waste character (e.g. flammables can be consolidated or bulked into a 55-gallon drum, pesticide containers can be packed into a 55-gallon drum with other pesticides, etc.) A Uniform Hazardous Waste Manifest, which identifies the waste types and number of drums/containers, is created for each CESQG and for each HHW collection event in accordance with the VHWMR. The CESQG signs as the generator for his/her wastes.

The drums or containers are loaded into a tractor-trailer for transport to an out-of-state Treatment/Storage/Disposal (TSD) facility. The Hazardous Waste Transporter must be registered with the Commonwealth and the EPA and must comply with DOT regulations for transportation of hazardous materials under 49 CFR part 172, subpart F.

The hazardous waste must be delivered to a TSD facility for off-loading within 3 days of the event. All operations at the TSD must be in accordance with Federal and State law.

Each type of waste is treated by a different process and ultimately disposed of or recycled. Flammable materials are fuel-blended and burned as an industrial fuel. Toxics, such as pesticides, are incinerated at an out-of-state permitted facility and the resulting ash is handled in accordance with Federal regulations. Reactive wastes (such as Oxidizers) are treated and landfilled. Corrosives are treated, neutralized and either landfilled if a solid or discharged to a sewage treatment plant if a liquid.

3.4.2.5 Special Waste Collection

Special wastes are those solid wastes that require special handling. The Loudoun County Solid Waste Management Facility (the LCSWMF) and OSWM oversee the collection, diversion, and recycling of seven special wastes through private contractors. A waste flow description is provided for each waste type.

- Recovered refrigerant,
- Waste motor oil,

CHAPTER 3.0

SOLID WASTE MANAGEMENT SYSTEM

- Antifreeze,
- Scrap tires,
- Automotive batteries,
- Scrap metals, and
- HHW and hazardous waste from CESQGs.

Recovered Refrigerant: Refrigerant (CFC and HCFCs) is removed from refrigerant containing units that enter the LCSWMF with the charge intact (e.g. refrigerators, air conditioners, dehumidifiers). The refrigerant recovery equipment and the operator must be certified by Air Reconditioning and Refrigeration Institute (ARI) or Underwriters Laboratories (UL) under the ARI 740-1993 Standard per 40 CFR Part 82, Subpart F. The County's recycling operations at the LCSWMF recover 5 different types of refrigerant (e.g. R-12, R-22, R-134a, 500, and 502). A private contractor processes the recovered refrigerant for recycling or reuse. The appliances are handled as scrap metal.

Used Motor Oil: Loudoun County residents and businesses use the Used Oil collection tank at the LCSWMF recycling center. They pour the oil into the tank (double walled, steel tank) and leave the containers (typically quarts, 5-gallon buckets to 55-gallon drums) at the LCSWMF. A contractor pumps the tank contents on a weekly basis. The used oil is ultimately transferred to an out-of-state storage facility and ultimately burned as an industrial fuel oil.

Used oil is potentially regulated as a hazardous waste in Virginia but because the used oil is recycled as a product fuel it is conditionally excluded from regulation as a hazardous waste. The waste oil must be transported in accordance with Department of Transportation (DOT) regulations 49 CFR Parts 100-185. The waste oil transporter must have an EPA identification number and must placard (identify) the product in accordance with DOT regulations.

Antifreeze: Loudoun County residents and businesses use the Used Antifreeze collection tank at the LCSWMF recycling center. They pour the antifreeze into the tank (double walled, steel tank) and usually leave the containers (typically quarts, 5-gallon buckets) at the LCSWMF. A contractor pumps the tank contents on an as-needed basis to an out-of-state storage facility. The waste antifreeze is refined or recycled to make more antifreeze.

Used antifreeze is not specifically regulated as a hazardous waste in Virginia nor is it a RCRA listed hazardous waste. However, the antifreeze must be transported in accordance with Department of Transportation (DOT) regulations 49 CFR Parts 100-185.

Scrap tires: Loudoun County residents and businesses deliver a variety of tires to the LCSWMF for disposal. The tires are sorted by type and size and transported to Fairfax County for shredding. The tire shred is either used as an alternate daily cover or liner material on a landfill cell.

CHAPTER 3.0

SOLID WASTE MANAGEMENT SYSTEM

Automotive batteries: Loudoun County residents and businesses deliver automotive batteries to the LCSWMF DOC. The batteries are picked up on a weekly basis and delivered to an off-site location to be dismantled. 100% of the battery is recyclable.

Scrap metals: Loudoun County residents and businesses deliver a variety of scrap metals (e.g. appliances, swing sets, file cabinets) to the LCSWMF for recycling. LCSWMF staff loads the materials into a 60-yard roll-off container. The container is picked up at least twice a week and transported to an out-of-state shredder. The recovered metals, ferrous and non-ferrous, are marketed as raw materials.

Table 3-3 lists some of the known special and recyclable waste processors that take some of these special wastes and other materials:

Table 3-3: Special and Recyclable Waste Processors

Recyclable Material	Processor Name	Location
Antifreeze	U.S. Filter Mid States Oil Refining Co.	Alexandria, VA Baltimore, MD
Motor Oil	Safety-Kleen Corporation U.S. Filter Mid States Oil Refining Co.	Buffalo, NY Alexandria, VA Baltimore, MD
Nickel-Cadmium Batteries	Rechargeable Battery Recycling Corporation	Gainesville, FL
Tires	Fairfax County Resource Recovery Facility	Lorton VA
Computers	Subtractions, Inc.	Highland, MD
Animal Fat, Bones, and Restaurant Grease	Valley Protein	Winchester, VA
Utility Poles	Koppers Industries	Pittsburgh, PA
White Goods	Conservit	Hagerstown, MD

Source: Loudoun County. (2000). *Annual Solid Waste Collection and Recycling Report* (per Chapter 1084).

3.4.3 The Role of the Towns

Each of the LCSWMPD's Towns contracts with private waste collectors for curbside recycling collection services for their residents. These contracted services are exempt from regulation by Chapter 1086, the Loudoun County Solid Waste Reduction and Recycling Ordinance. A description of the respective Town solid waste and recycling collection services is below.

CHAPTER 3.0

SOLID WASTE MANAGEMENT SYSTEM

Town of Hamilton: The Town of Hamilton, through a contract with a private solid waste collector, provides curbside solid waste and recycling collection services to its residents. The contract also provides for curbside collection of yard waste, brush and bulky items. The Town provides recycling bins to its residents.

Town of Hillsboro: The Town of Hillsboro, through a contract with a private solid waste collector, provides curbside solid waste and recycling collection services to its residents. The contract also provides for curbside collection of yard waste, brush and bulky items.

Town of Leesburg: The Town of Leesburg, through a contract with a private solid waste collector, provides curbside solid waste and recycling collection services to its residents. The contract also provides for curbside collection of yard waste and bulky items, provides dumpster service to certain Town properties and to downtown commercial establishments. The contract provides collection and service to three Recycling DOCs located in the Town. The Town provides recycling bins to its residents and operates several Recycling Dropoff Centers. Town crews collect leaves and brush.

Town of Lovettsville: The Town of Lovettsville, through a contract with a private solid waste collector, provides curbside solid waste and recycling collection services to its residents. The contract also provides for curbside collection of yard waste, brush and bulky items. The contractor provides recycling bins to Town residents.

Town of Middleburg: The Town of Middleburg, through a contract with a private solid waste collector, provides curbside solid waste and recycling collection services to its residents. The contract also provides for curbside collection of yard waste and brush. The Town provides recycling bins to its residents.

Town of Purcellville: The Town of Purcellville, through a contract with a private solid waste collector, provides curbside solid waste and recycling collection services to its residents. The contract also provides for curbside collection of yard waste, brush and bulky items and dumpster service to Town properties and operations. The Town provides recycling bins to its residents.

Town of Round Hill: The Town of Round Hill, through a contract with a private solid waste collector, provides curbside solid waste and recycling collection services to its residents. The contract also provides for curbside collection of yard waste, brush and bulky items. The Town provides recycling bins to its residents.

3.4.4 The Role of Private Sector Solid Waste Industry

Private solid waste management firms provide all residential curbside and commercial recycling services in the District, through contracts managed by local governments, businesses, HOAs, or individual subscribers. Companies that provide

CHAPTER 3.0 SOLID WASTE MANAGEMENT SYSTEM

recycled materials transport out of the County, called backhaulers, typically serve large corporate stores or franchises and often transport special materials that are not recycled locally. These materials include wood pallets, scrap iron, large quantities of baled cardboard or other types of paper.

Private solid waste collectors and waste management firms in the District provide services including collection, sorting, regional marketing, and transporting of recycled materials. The materials are sent outside the County to Material Recovery Facilities or directly to manufacturers. The County contracts with a private firm for the collection of PRMs at the County's DOCs. The DOCs accept commingled containers, newspapers and cardboard, and white office paper. In turn, the private firm takes the materials to individual processing facilities and MRFs in Northern Virginia to be processed and sent to market. Likewise, private collectors in the County take recyclable materials to processors in the area. **Table 3-4** lists regional processing facilities.

Table 3-4: Regional Recycling Processors

Recyclable Material	Processor Name	Location
Cardboard	Butler Paper Environmental Recycling, Inc. Fairfax Recycling Giant of Maryland, Inc. Merrifield Transfer Station Waste Management, Inc.	Suffolk, VA Alexandria, VA Burke, VA Landover, MD Merrifield, VA Sterling, VA
Metal	Davis Industries Environmental Recycling, Inc. Fairfax Recycling Potomac Metals Waste Management, Inc.	Lorton, VA Alexandria, VA Burke, VA Sterling, VA Sterling, VA
Paper	Capitol Fiber, Inc. Environmental Recycling, Inc. Fairfax Recycling Merrifield Transfer Station Southeast Paper Recycling Universal Recycling Waste Management, Inc.	Springfield, VA Alexandria, VA Burke, VA Merrifield, VA Richmond, VA Hyattsville, MD Sterling, VA
Commingled Containers	Fairfax Recycling P.G. County MRF Waste Management, Inc.	Burke, VA Capitol Heights, MD Sterling, VA
Vegetative Yard Waste	Loudoun Composting William Hazel, Inc.	Chantilly, VA Loudoun Co., VA

Source: Loudoun County. (2000). *Summary Waste Handling Report* (per Chapter 1080).

CHAPTER 3.0 SOLID WASTE MANAGEMENT SYSTEM

3.4.5 The Role of the County in Recycling Markets

In addition to the materials collected by solid waste collectors in the County, there are a number of facilities and specialty service collectors that provide service to LCSWMPD. The County does not maintain a universal recycling reporting system as do some localities, so information on regional recycling services is limited. The County contracts with vendors for collection, transport and processing of special wastes.

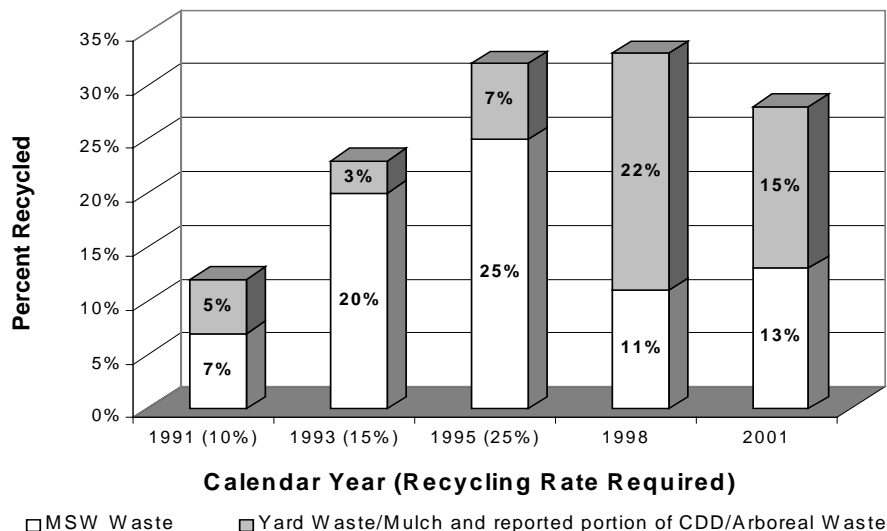
Through the Special Wastes and Household Hazardous Waste Collection Programs, as well as through private collectors, the County collects SRMs, which are sent to various processors throughout the country to be processed and sent to market.

The above information is not an all-inclusive picture of the County's role in recycling markets. Recycling reporting requirements have been increased in recent amendments to Chapters 1084 and 1086. Additionally, staff will continue to identify major producers and processors of special wastes and recyclables to target information and assistance that can help the County meet its recycling goals.

3.4.6 Recycling Rates

The District annually completes a recycling rate report in compliance with State regulations 9 VAC 20-130-10 *et seq.* State regulations specify that PRMs and SRMs be included in calculating the rate. The District uses the State formula for the recycling rate (**Appendix O**). **Appendix O** provides a copy of the Commonwealth of Virginia's Locality Recycling Rate Report. Prior regulations required reports in 1991, 1993, and 1995. Interim rates were calculated by staff and an interim report was filed with the State in 2000 and in compliance with new 2001 regulations for the Calendar Year 2001. **Figure 3-6** shows the rates reported to the State.

Figure 3-6: Recycling Rates Reported to VA DEQ



CHAPTER 3.0

SOLID WASTE MANAGEMENT SYSTEM

3.4.6.1 Loudoun County's Recycling Rate

While the County has technically met the 25% recycling rate, the chart demonstrates the County's increasing reliance on VW recycling to meet the mandated rate. The effective rate of MSW recycled, therefore, has actually decreased over time.

3.4.6.2 Materials Recycled in Loudoun County

The Virginia DEQ specifies PRMs and SRMs that can be included in the LCSWMPD recycling rate calculations toward achieving the mandatory recycling rates established by the Code of Virginia, Chapter 14, Title 10.1-1411.

PRMs collected in LCSWMPD include paper, glass, metal, plastic, and yard waste.

The greatest percentage of residential recyclable materials is collected through curbside recycling programs and typically include newspaper, magazines, and commingled plastic, glass, and metal food, beverage, and detergent containers, and yard waste. Cardboard and paperboard will be included in most curbside programs beginning July 2003.

The County of Loudoun operates recycling DOCs throughout the County for the collection of residential newspaper, magazines, phonebooks, catalogs, cardboard, paperboard, and commingled plastic, glass, and metal food, beverage and detergent containers. In addition to these materials, sorted white ledger paper is collected at the LCSWMF recycling DOC. Scrap metal, white goods, and yard waste are also accepted at the LCSWMF.

The Town of Leesburg operates recycling DOCs at shopping centers in the Town for the collection of newspaper, and commingled plastic, glass, and metal food, beverage and detergent containers.

PRMs collected from businesses in the County typically include cardboard, sorted white ledger paper, mixed paper and metals. Beginning October 2003, businesses located in the unincorporated areas of the County are required to recycle their PRM generated in the greatest quantity.

SRMs collected in the District for recycling include waste tires, waste oil and oil filters, waste antifreeze, automobile bodies, automobile batteries, C&D waste and debris waste. The majority of SRMs are generated by businesses. Businesses rely primarily on private waste collectors/recyclers for SRM collection. The LCSWMF, however, offers residents and businesses the opportunity to recycle items including tires, automotive batteries, waste oil, waste antifreeze, debris waste, and C&D wastes including concrete, broken brick, and paving materials.

CHAPTER 3.0

SOLID WASTE MANAGEMENT SYSTEM

3.4.7 Community Organizations

Community organizations offer an array of specialized services including annual litter removal campaigns, beautification projects, recycling opportunities, and environmental education in local schools.

3.5 Strategy for Public Education in Solid Waste Management

Successful implementation of this solid waste management plan will require an ongoing comprehensive public education and recycling information strategy. The strategy will use the County's current and planned public outreach programs to educate and involve the public through active participation in the planning and decision-making process.

The County maintains a Recycling Hotline used regularly by the public to answer questions and to provide general information to the public regarding recycling services and programs. The County also publishes numerous brochures and leaflets describing the County's recycling services and distributes these Countywide.

Citizen requests for information about solid waste services, reduction and recycling continue to increase. New residents are especially confused by the lack of standardized procedures for solid waste collection and recycling and expect the County to provide service and to safeguard recycling efforts. Sending a clear message to residents about refuse collection and recycling will continue to be a challenge in an environment where most services are privately contracted.

3.6 Dump Complaints/Litter Control

Illegal dumping includes trash, brush, furniture, or C&D dumped along a roadway, vacant lot, field, or wooded area. Illegal dumping also includes the unauthorized use of a dumpster or leaving unwanted items at the County's DOCs. Chapter 1080 of the Loudoun County Codified Ordinances prohibits disposal of solid waste at any location other than a legal disposal facility and specifies that property owners are responsible for any illegal dumping that occurs on their land.

3.7 Public/Private Partnerships

Previous LCSWMPD planning documents have discussed the possibility of developing public/private partnerships to assist in the delivery of solid waste management services in the County. No such formal agreements exist at this time. However, the County makes extensive use of contracted services with the private sector in the delivery of County solid waste programs. Recycling Dropoff Center services, HHW collection and disposal, solid waste engineering services, and environmental monitoring services are all delivered through contracted services with County staff oversight.

CHAPTER 3.0 SOLID WASTE MANAGEMENT SYSTEM

3.8 Waste System Flow

The majority of solid waste generated in LCSWMPD is collected by private companies at the curbside and taken to either an in-County WTS or hauled directly to an out-of-County disposal facility. Some of the solid waste generated in the County is hauled by individuals and disposed of at the LCSWMF.

3.8.1 Changes in Waste Flow Patterns

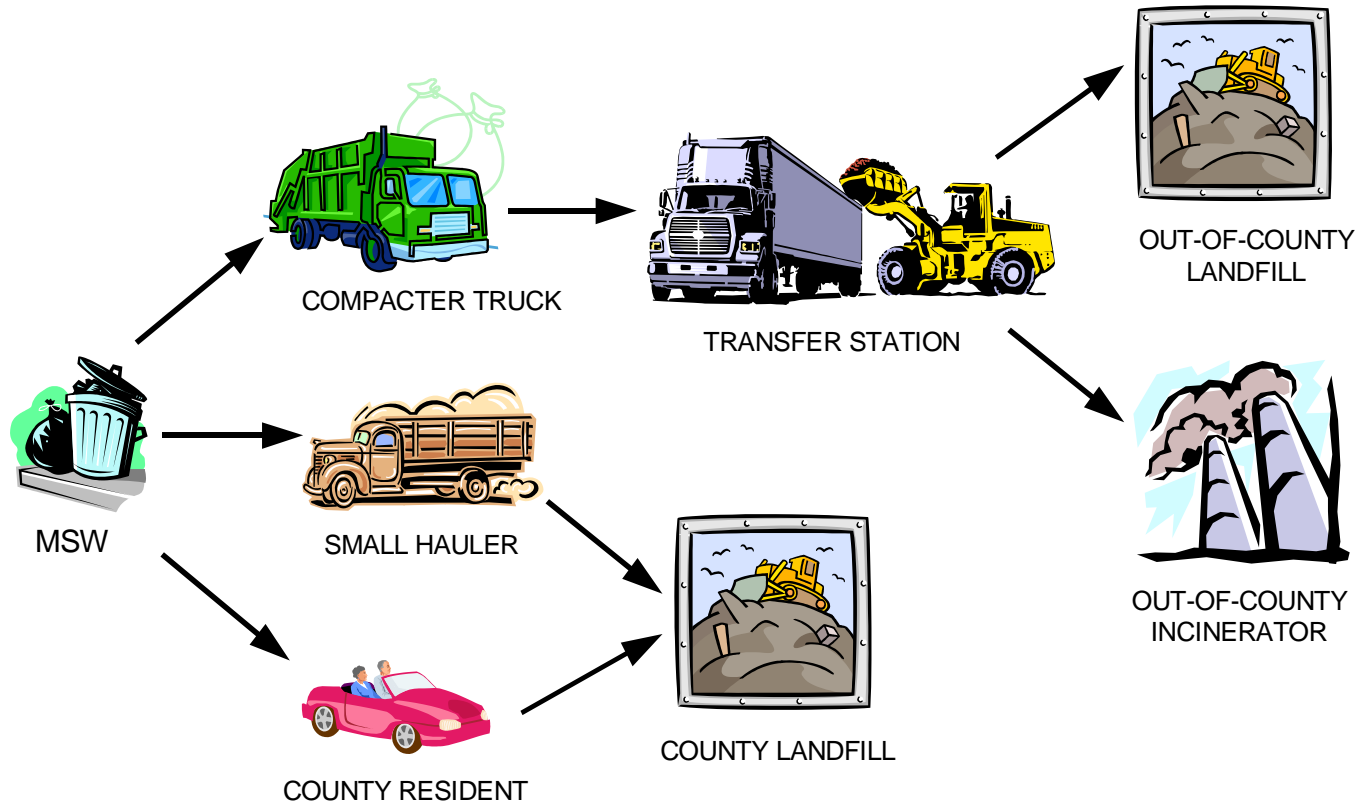
In the past decade, solid waste has become a highly mobile commodity; its final destination changes daily without advance notice. Local governments, public solid waste authorities, and private companies nationwide have constructed landfills, incinerators and other expensive waste disposal facilities anticipating use by their residents and payment for the facilities by tipping fees. In some instances, private sector entrepreneurs offer short-term disposal rates lower than the public disposal facilities causing usage and anticipated public revenues to fall short. Government attempts to preserve a customer and revenue base by requiring all residents to use the government facility was a practice called flow control. Flow control was found to be unconstitutional on the basis of affecting interstate commerce in a landmark 1994 Supreme Court decision (Carbone v. Clarkstown, 128 L.Ed. 399 (1994)).

3.8.2 Changes in Municipal Solid Waste Flow

Since 1992, the County's MSW waste flow pattern has changed radically. The County handled nearly 100 % of its solid waste in the early 1990's. Beginning in 1993 with the opening of the first private WTS in the County, much of the solid waste is now transported out of the County for disposal. From the mid to late 1990's, the solid waste industry became vertically integrated, with large solid waste companies merging and providing "cradle to grave" solid waste services from curbside collection to transport out of the County to disposal in large "mega" landfills in the Southeastern part of Virginia. Also during that time period, Virginia assumed its place as the second largest waste importing State in the nation, importing large amounts of waste from the Northeast. A waste flow diagram for MSW is presented in **Figure 3-7**. The location of long-haul MSW disposal facilities located in Virginia is shown in **Figure 3-8**.

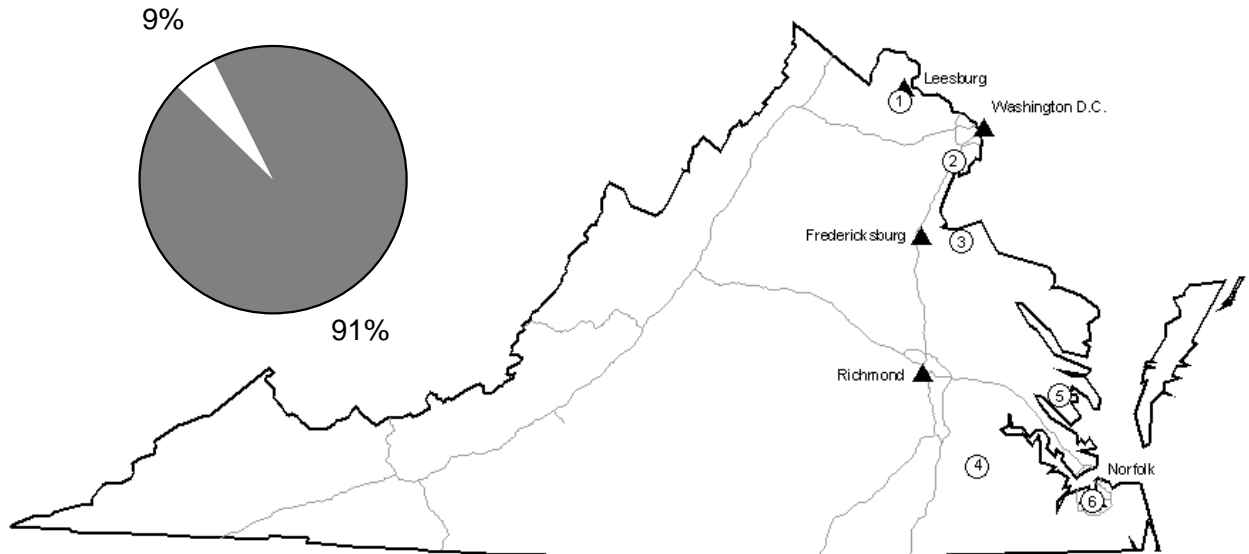
CHAPTER 3.0 SOLID WASTE MANAGEMENT SYSTEM

Figure 3-7: Waste Flow Model — MSW



CHAPTER 3.0 SOLID WASTE MANAGEMENT SYSTEM

**Figure 3-8: Disposition of MSW Generated in Loudoun County, Calendar Year 2002 (MSW generated that is recycled is excluded)
(In pie chart, dark = MSW transferred out of the District, light = MSW landfilled at LCSWMF)**



Map Source: Loudoun County OMAGI

Final Disposition of MSW Transferred out of Loudoun County:

1. Loudoun County Solid Waste Management Facility
2. Fairfax County Incinerator, Lorton, Fairfax County, Virginia; ~45 miles one way
3. King George Sanitary Landfill, King George, King George County, Virginia (operated by Waste Management or subsidiary); ~100 miles one way
4. Atlantic Waste Disposal Sanitary Landfill, Waverly, Sussex County, Virginia (owned by Waste Management or subsidiary); ~175 miles one way
5. Middle Peninsula Sanitary Landfill, Gloucester, Gloucester County, Virginia (owned by Waste Management or subsidiary); ~170 miles one way
6. SPSA Incinerator, City of Portsmouth, Virginia; ~220 miles one way

CHAPTER 3.0

SOLID WASTE MANAGEMENT SYSTEM

3.8.3 Construction and Demolition Waste Flow

The District's growth over the last decade is projected to continue. Most of the resultant C&D waste is exported to privately operated processing facilities or to C&D landfills. While MSW landfill capacity for Virginia is estimated at 32 years, C&D landfill capacity is estimated at 8 years. The regional C&D landfill capacity is less certain and with the fast growth in Northern Virginia, the C&D waste being generated in ever increasing quantities warrants review for options to landfilling. A diagram of C&D waste flow is presented in **Figure 3-9**. **Figure 3-10** shows the disposition of the C&D waste generated in the LCSWPD.

3.8.4 Vegetative Waste Flow

VW generated in the District travels in several directions. Of the yard waste collected at residential curbs in the District, reports indicate that some goes to landfills and some goes to a private yard waste composting facility in the County. One of the permitted companies processes only the waste generated from its own land clearing activities. Land clearing material from other companies' activities is hauled out of the County, where it is processed into saw logs, mulch, and wood chips. Waste flow diagrams for VW are presented in **Figures 3-11 and 3-12**.

3.9 External/Regional Factors

There are a variety of factors that could impact solid waste management in LCSWMPD at any time. Understanding potential factors and their effects on the County will assist in planning a solid waste management strategy that will ensure maintenance of adequate solid waste management services for the community.

3.9.1 Federal/State Legislation

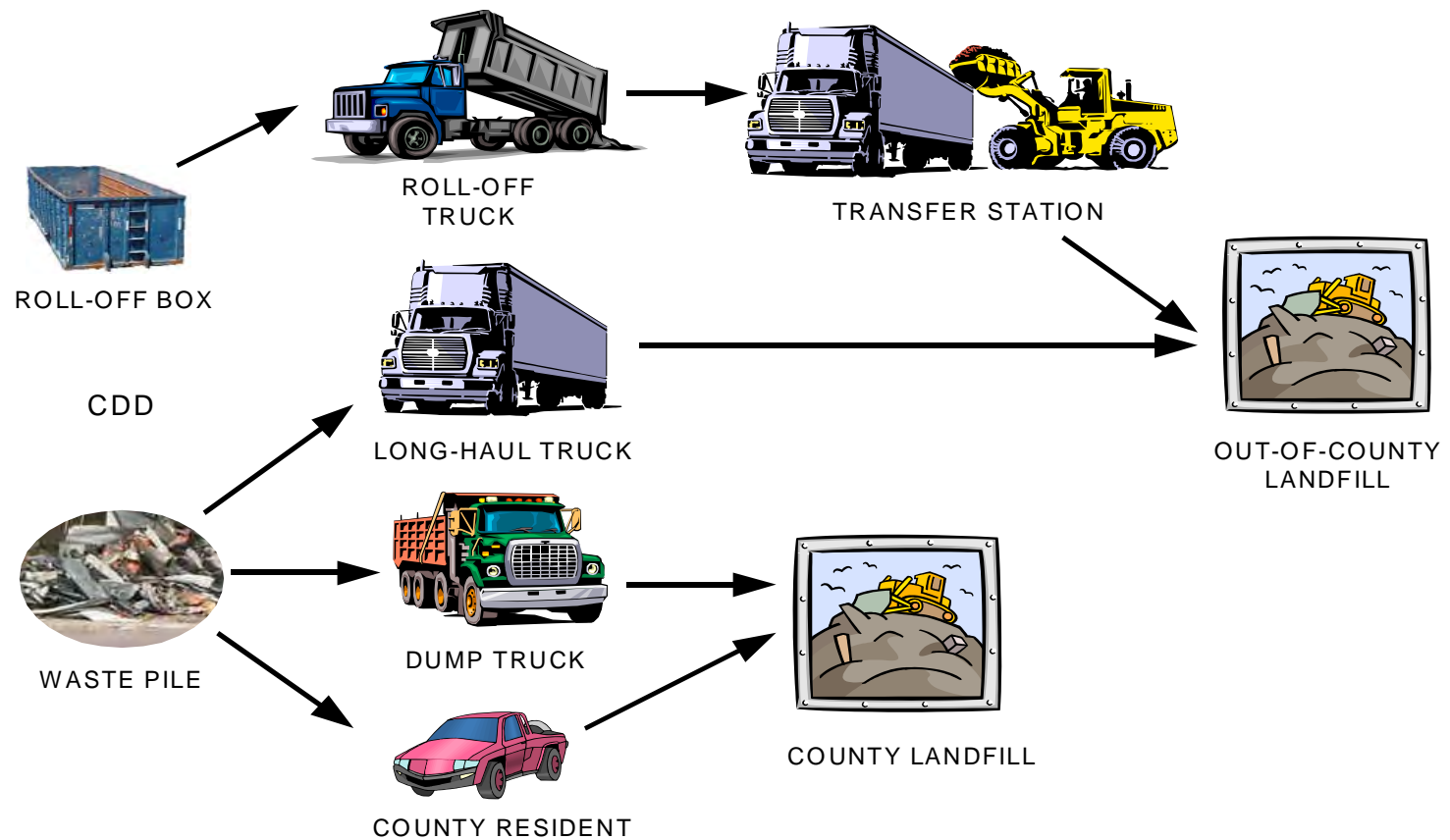
Federal and State solid waste management legislation affects local waste management at all levels, such as collecting, processing, transporting and disposing of wastes. Legislative action could lead to a greater influx of waste and diminished long-term capacity at local disposal facilities, shifts in local services, and additional requirements for residents, businesses, and government. Legislation targeting control over waste transport, increasing recycling rates, and changing disposal procedures for certain wastes could have an impact on waste disposal and recycling.

A 1994 Supreme Court decision declared "solid waste flow control," or the ability of jurisdictions to direct where their waste would go, to be unconstitutional on the grounds that it restricted interstate commerce.¹ Federal legislation restoring options for flow control at the State or local level could (text continued on page 33)

¹ Municipal Solid Waste Management, *Commerce Claws Grips Government*. MSW Elements 2001. Available from www.forester.net/msw_0011_commerce.html. Internet.

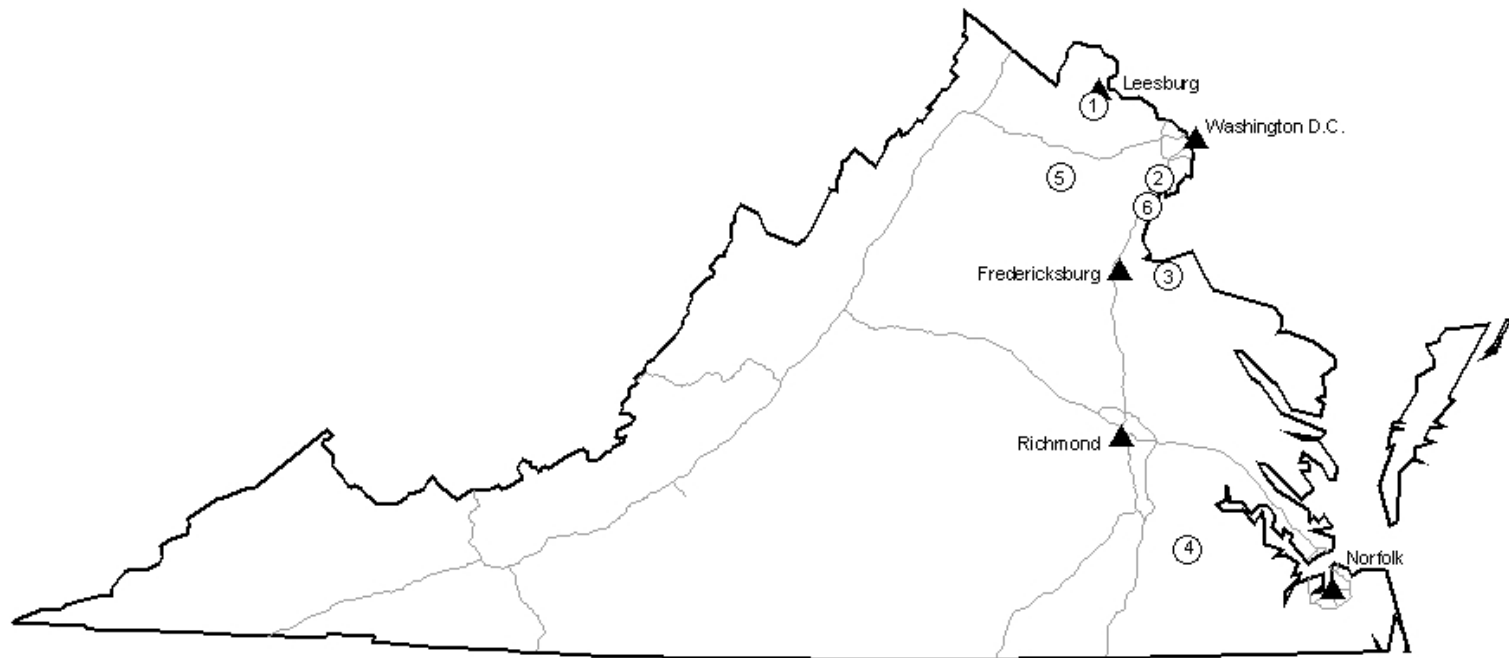
CHAPTER 3.0 SOLID WASTE MANAGEMENT SYSTEM

Figure 3-9: Waste Flow Model — C&D



CHAPTER 3.0 SOLID WASTE MANAGEMENT SYSTEM

Figure 3-10: Disposition of C&D Waste Generated In Loudoun County



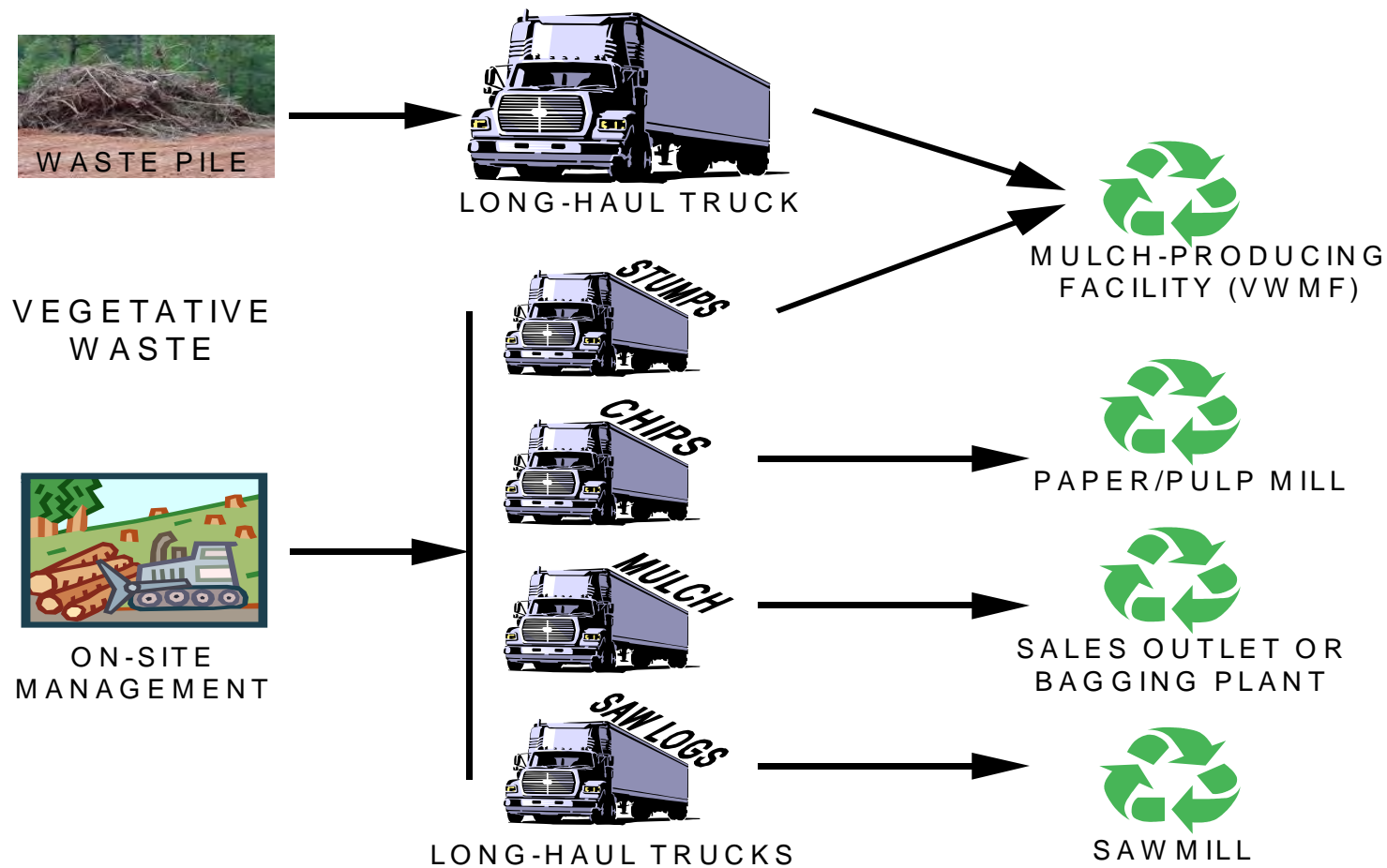
Map Source: Loudoun County OMAGI

Final Disposition of C&D Generated in Loudoun County:

1. Loudoun County Solid Waste Management Facility
2. Lorton C&D Landfill, Fairfax, Virginia (privately owned facility); ~45 miles one way
3. King George Sanitary Landfill, King George, King George County, Virginia (operated by Waste Management or subsidiary); ~90 miles one way
4. Atlantic Waste Disposal Sanitary Landfill, Waverly, Sussex County, Virginia (owned by Waste Management or subsidiary); ~165 miles one way
5. Fauquier County Sanitary Landfill, Warrenton, Virginia; ~35 miles one way
6. Potomac C&D Landfill, Dumfries, Prince William County, Virginia (privately owned facility); ~45 miles one way

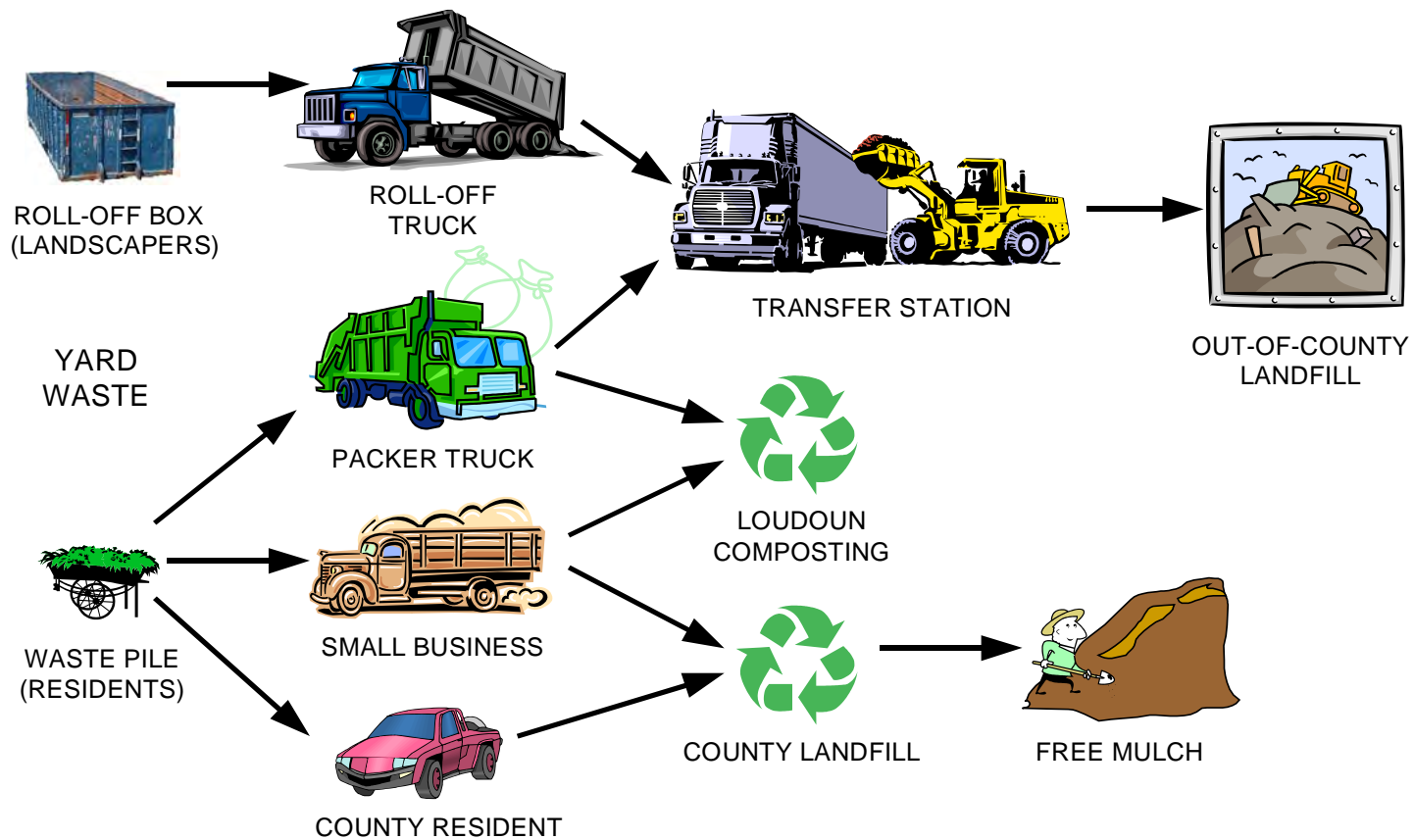
CHAPTER 3.0 SOLID WASTE MANAGEMENT SYSTEM

Figure 3-11: Waste Flow Model — VW



CHAPTER 3.0 SOLID WASTE MANAGEMENT SYSTEM

Figure 3-12: Waste Flow Model — Yard Waste



CHAPTER 3.0

SOLID WASTE MANAGEMENT SYSTEM

redirect waste flow in Virginia modifying many current waste management system conditions. Examples of other Congressional and State legislative activities that could affect the solid waste management system include:

- A 2002 bill introduced in the U. S. Senate that would require national beverage container deposits and recycling,
- Proposed EPA changes to hazardous waste regulations to encourage CRT recycling,
- A 2002 bill in the General Assembly to increase the State recycling rate to 35%, and
- Two electronics recycling bills in the 2003 Virginia General Assembly.

3.9.2 Diminished Processing Capacity

The majority of the District's solid waste is exported for disposal at solid waste management facilities outside the County. Increasing disposal fees, more favorable contracts from other sources, or other conditions may make this external capacity less available to County transfer businesses. These conditions could redirect waste collected in the District to disposal facilities located in the District.

Publicly available processing capacity in LCSWMPD for landclearing debris has decreased to the point of being nearly non-existent. One facility operates but only collects landclearing debris waste that its own company generates. Currently, there is one yard waste processing facility that operates in the County and is openly available. This facility accepts waste delivered by waste collectors, 80% of which is imported from Fairfax County. The LCSWMF processed 1,569 tons of VW in 2002, less than 10% of the County's estimated VW stream.² Population growth and revisions to the County recycling ordinance to increase mandatory recycling requirements for yard waste will only place greater demands on local processing capacity.

Processing capacity for commingled recyclable materials including bottles, cans and paper is currently limited to a few facilities that possess the ability to sort recyclables by type. Two of the facilities, located in Alexandria, Virginia and Prince George's County, Maryland report that they are operating at only 50% capacity. There are also several facilities around the Metropolitan Washington D.C. area that are receiving various grades of paper. A recycling WTS in Merrifield, Virginia is reported to be operating at 25% capacity, processing over 700 tons of paper per day. Loss of one or more of these facilities could lead to greater distances to deliver materials for recycling, and place greater demands on local processing facilities, both of which could lead to significant service cost increases.

² This figure assumes 69,458 households generating 500 pounds each annually for disposal.

CHAPTER 3.0

SOLID WASTE MANAGEMENT SYSTEM

3.9.3 Increasing Fuel/Transportation Costs

The cost of fuel is one of many factors affecting the choice of disposal options made by solid waste collectors. Fuel costs are unlikely to be a deciding factor that would create a major shift in destinations for waste disposal. The amount of waste directed to the LCSWMF likely depends more on the difference between the LCSWMF tipping fee and that of other facilities. If tipping fees increased drastically elsewhere, solid waste collectors that normally transport waste to other jurisdictions could have to decide between coming to LCSWMF or raising their service charges.

3.9.4 Declining Market Value of Recyclable Materials

The value of recyclable materials has a direct impact on the viability of local recycling programs, in regard to cost and service availability. Rising market value for recyclable commodities can help restrain rising program costs, and likewise the devaluation of commodities can increase program costs and even lead to the elimination of certain recyclable materials from collection programs. Sustained lulls in the market for one or more commodities could force local recycling programs to drop certain materials from collection programs which could threaten the County's ability to meet the Virginia mandatory recycling rate.

3.10 Issues With Solid Waste Management System

3.10.1 Current System Has No Warranty, Expressed or Implied

The solid waste management system in LCSWMPD is primarily operated by the private sector guided by market forces. As long as profits can be maintained, services will continue. There is no contractual bond with the County to ensure that these essential services will continue. The County can steer these efforts to some degree through regulation. The County would be ill equipped to assume any one of the primary functions of collection, transportation and disposal should the private sector efforts fail.

3.10.2 Waste Changes Every Five Years or so

The last 35 years have seen multiple erratic swings in the solid waste industry, and the industry has not proven an accurate prognosticator of the next major trend. For example, in 1990, waste experts were predicting exhaustion of all landfill disposal capacity with 5-10 years and disposal rates of over \$100 per ton. In contrast, excess short-term capacity was constructed and the financial stability of many local jurisdiction waste facilities was undermined by loss of flow control. A new trend is likely to occur in the near future but it is uncertain what the nature, timing, or impact will be. Rising fuel prices, national flow control legislation, sweeping new environmental legislation, and acts of terrorism are all factors that could alter the current solid waste management system.

CHAPTER 3.0

SOLID WASTE MANAGEMENT SYSTEM

3.10.3 Recycling of MSW Declining

Recycling rates appear to be declining in Loudoun County and many other localities. Funding for recycling programs has been decreased in areas under substantial financial stress. The future appears to hold increases in Federal and State recycling rate requirements without financial assistance. The three most important elements of successful recycling programs are public education, consistency and ease of compliance. In LCSWMPD, it is difficult to mount a sustained public education message on recycling because each collector, HOA, Town government, or business has to develop its own recycling systems. There is little consistency in operations, sometimes individuals or businesses that wish to recycle find it challenging to do so.

3.10.4 Disposal of Consumer Recyclables

As curbside collection became more prevalent in the mid-to-late 1990's, there were increasing reports of sorted recyclables being disposed by collection companies. These practices discouraged citizens who had made the effort to recycle. In 2002, the Board of Supervisors addressed this issue and added a prohibition on disposal of consumer-separated recyclables in the Solid Waste Ordinance amendments. Full implementation of the amendments will take time to determine if the problem is solved.

3.10.5 Service Gaps in Rural Loudoun

Solid waste collectors in the rural areas are largely an aging workforce with few family members who wish to continue the business. These collectors remain a vital part of the system in the District. Many rural residents find collection is too expensive and transport their trash directly to the LCSWMF or improperly dispose of it by burning it, burying it on their property, or dumping it. Recycling services in rural areas are typically not provided at the curbside. Rural residents rely on the County-operated DOCs for recycling; unfortunately, these facilities and services are not maintained at the level envisioned in the early 1990s.

3.10.6 County Has Responsibility for Special Waste

The private sector provides solid waste services that are profitable. Handling special wastes does not typically fall into the profit category, and thus the private sector has not offered broad-based programs to collect waste oil and antifreeze, HHW, tires, Ni-Cd batteries, or electronic devices. It falls to government to develop and fund programs that will help avoid improper disposal and the resultant environmental consequences. From the 1970's until 1996, the County used surplus revenues from the profitable sectors of the public system to offset these program costs. As new programs and special waste requirements are promulgated, it is likely that the local government will be responsible for funding these efforts.

CHAPTER 3.0

SOLID WASTE MANAGEMENT SYSTEM

3.10.7 County Cannot Direct the Allocation of Private Facility Capacity

The County system utilizes numerous private sector waste management facilities, both within the County and beyond. There is sufficient capacity in most areas to address near-term needs. However, there is no guarantee that the capacity of any facility will be available to provide for County needs. As an example, the capacity of the only yard waste facility in the County is largely consumed by yard waste disposal from Fairfax County. The WTSs that operate in the County are dependent on facilities in other jurisdictions to accept the waste that they collect. The County has no way of knowing that the current capacity will be sustained for any specific period of time.

3.10.8 Disaster/Emergency Response

The ability of the County's solid waste management system to absorb sudden shifts resulting from emergencies will depend on the preparedness of its local coordinating agency in emergency response, the role of public and private entities in solid waste collection and disposal, and local disposal capacity. The County's Emergency Management Agency is currently incorporating solid waste management into "The Loudoun County Emergency Operations Plan," which is expected to be complete by 2003.

The need for extra landfill capacity could confront the County following a disaster. The current solid waste management system is capable of handling situations that create minimal debris, but solid waste resources to respond to a catastrophic event are insufficient. 9 VAC 20-80-485B provides for the issuance of a 90-day emergency solid waste facility permit in the event of a qualifying disaster. The District must have applied for pre-approval prior to such an event.

3.10.9 County Cannot Ensure the Preservation of the Status Quo

Major portions of the solid waste management system in the LCSWMPD rest with the private sector. As a result, the ability of the District members to ensure that the system will remain in place is limited.

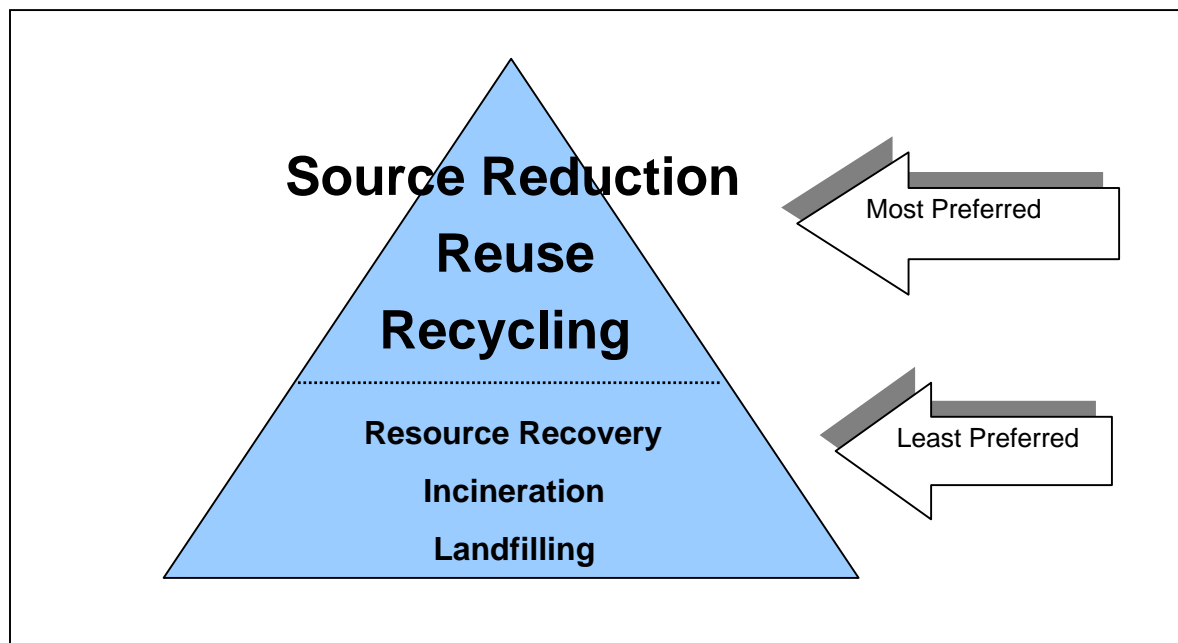
CHAPTER 4.0 CONSIDERATION OF THE SOLID WASTE HIERARCHY

4.0 CONSIDERATION OF THE SOLID WASTE HIERARCHY

4.1 The Solid Waste Hierarchy

The Code of Virginia (Section 10.1-1411) and the Virginia Solid Waste Management Regulations (9 VAC 20-130-10 *et seq.*) require local governments to develop a comprehensive and integrated solid waste management plan. The Plan, at a minimum, must consider and address all components of the solid waste hierarchy for all types of nonhazardous solid waste generated in the region or locality (**Figure 4-1**). The solid waste management hierarchy ranks methods of handling solid waste from most preferred methods of source reduction, reuse, and recycling, in that order, to least preferred methods of energy/resource recovery/incineration and landfilling.

Figure 4-1: Solid Waste Management Hierarchy (9 VAC 20-130-30)



The Plan must provide an integrated solid waste management strategy that considers all elements of waste management during generation, collection, transportation, treatment, storage, and disposal. Finally, the Plan must describe how the mandatory recycling rate of 25% of the total municipal solid waste (MSW) generated annually will be met or exceeded (9 VAC 20-130-120 B & C).

No single waste management approach is appropriate for all communities. Integrated solid waste management uses a combination of techniques and approaches to handle targeted portions of the waste stream. It is important to realize that the portions of the hierarchy interact with each other and that change on one level will impact or influence another level. The highest level overall goal is

CHAPTER 4.0

CONSIDERATION OF THE SOLID WASTE HIERARCHY

waste reduction – the least expensive method of handling solid waste is not to generate it in the first place.

4.2 Source Reduction

At the top of the hierarchy and the most preferred method is source reduction or "waste prevention" programs designed to reduce both the toxic constituents in products and the quantities of waste generated. Source reduction can be a front-end waste management approach by designing and manufacturing products and packaging with minimum volume and toxic content so as to help ensure that the product has a longer useful life. For the individual consumer or household, source reduction means consuming and throwing away less. It can be as simple as declining an unnecessary bag for a small purchase or as elaborate as establishing a backyard composting program or choosing cleaning products that do not contain hazardous chemicals.

4.2.1 Current Status

Source reduction is difficult to quantify because the goal is not to produce or generate waste. Loudoun County has implemented programs to reduce waste at the point of generation. Loudoun County currently has procurement policies to purchase materials with a recycled content. The County Extension Office encourages grasscycling and backyard composting where allowed. Businesses, manufacturers, consumers and local governments have been encouraged to implement Pollution Prevention (P2) programs to eliminate or reduce wastes at the source of generation. Plant/landscape nurseries, for example, indicate they have reduced or eliminated toxic pesticides from their inventories and have substituted nonhazardous chemicals.¹

Yard trimmings make up approximately 13 percent of the national waste stream and in regions such as Fairfax, Virginia, it is reported that yard trimmings amount to up to 25 percent of the waste stream. Furthermore, 50 percent of yard trimmings are grass clippings.² Fairfax County, VA estimates that a single family home produces roughly one-quarter ton of yard trimmings annually. Loudoun County expects there to be 175,600 households in 2020.³ Using the Fairfax County generation estimate, the Loudoun County Solid Waste Management Planning District (LCSWMPD) will require a facility capable in 2020 of processing 43,900 tons of yard trimmings annually.

4.2.2 Future Considerations

One policy option for the District to consider for waste reduction or minimization could be incentives or regulations to reduce the amount of vegetative waste (VW).

¹ OSWM. (July 2002). *Survey of Solid Waste Generation by Loudoun County Businesses*.

² U.S. EPA. (July 1999). *Organic Materials Management Strategies*. EPA 530-R-99-016.

³ Loudoun County Department of Economic Development. *Housing, Population and Employment Forecast*.

CHAPTER 4.0

CONSIDERATION OF THE SOLID WASTE HIERARCHY

Requiring land development site design standards that generate less VW and encouraging other recycling efforts such as backyard composting or grasscycling are two options. Furthermore, the market outlook for VW processing facilities could be assessed. Should the need exist for more vegetative waste processing capacity, such businesses could be recruited or developed by the District to meet local demand.

The District could consider a countywide Pay-As-You-Throw (PAYT) system for solid waste collection. Customers purchase stickers or special bags from the refuse collection firm and pay a set price for each bag of trash. The customer pays only for the amount of trash actually thrown away. PAYT programs have been implemented in jurisdictions where governments have contractual control over waste collection. According to the EPA, on average, PAYT communities reduce their waste by 14 to 27 percent, and increase recycling by 32 to 59 percent.⁴ It is uncertain how to implement a PAYT with private solid waste collectors controlling the solid waste collection system. Currently residents who use the Loudoun County Solid Waste Management Facility (LCSWMF) for disposal have the option of using the **FastTrash** program and pay a flat rate (a modified PAYT program) for disposal of up to ten 33-gallon bags of garbage. As of 2002, **FastTrash** is available only on Saturdays.

Public procurement policies could be extended to include construction materials, vehicles, furniture, carpeting etc., along the Federal Comprehensive Procurement Guidelines (CPG) and the District could participate in "buy-recycled" programs. Buying recycled content goods helps "close the recycling loop" by putting the materials collected through recycling programs back into the marketplace as products.

4.3 Reuse

Reuse is a waste reduction strategy where a product is used for the same or new purpose without undergoing a physical change. Used clothing or goods to an outlet for distribution to others (Salvation Army, consignment stores) is a form of reuse.

Reuse practices are not currently identified or tracked in the District, so reuse quantities are difficult to estimate.

4.3.1 Current Status

The Loudoun County Government operates a Surplus Store for the sale of used goods and supplies. The Salvation Army and similar community stores collect useable goods for resale or distribution as necessary. Consignment stores in the District offer an outlet for resale and reuse of goods. Businesses surveyed in the OSWM 2002 Survey of Loudoun County Businesses indicated reuse of materials

⁴ Gordon, Jr., Hui. (May 1999). "Pay-As-You-Throw" Continues to Grow. *Waste Age*, May 1, 1999.

CHAPTER 4.0

CONSIDERATION OF THE SOLID WASTE HIERARCHY

such as pallets and plastic bags within their operations. Reuse is hard to quantify because the "waste" materials are reused and solid waste is not generated.

The County has recently implemented a program to collect used liquid petroleum gas cylinders (propane gas) for retrofitting and reuse when possible.

4.3.2 Future Considerations

The District may consider reuse programs or incentives for activities such as:

- Too Good to Waste Program
- Waste Paint Exchange
- Construction Materials (windows, lumber, unused block/brick) Exchange

4.4 Recycling

Recycling provides the opportunity to reclaim valuable resources and to minimize the amount of waste placed in landfills. Recycling diverts materials (such as metal, glass, plastic and paper) from final waste disposal back into the consumer market and saves energy in the manufacturing of new products made from recycled feedstock. Recycling may also help defray potential cost escalation for solid waste collection and disposal.

4.4.1 Current Status

Currently some recyclable materials are collected by private waste collection services in the Towns, and in some neighborhoods or Homeowners' Associations (HOAs) in the District. Loudoun County operates Recycling Dropoff Centers (DOCs) for the collection of commingled containers, newsprint, magazines, phonebooks, and cardboard to cover gaps in the existing curbside collection program. Changes to Chapters 1084 and 1086 of the Codified Ordinances of Loudoun County should increase recycling by residents and proper handling of recyclable materials collected by the solid waste collectors.

Special wastes such as waste oil, antifreeze, automobile batteries, scrap metal, and tires are routinely collected at the LCSWMF. Household hazardous wastes (HHWs) and hazardous wastes from qualifying businesses are collected at special events staged throughout the District on periodic basis. The County has implemented special collection events for Christmas trees and electronics recycling. VW delivered to the LCSWMF is chipped to produce mulch that is free to LCSWMPD residents and can be used in a variety of ways.

The District's recycling rate in 2001 was 28% based on the inclusion of yard waste recycled at a private composting facility operating in the District. Currently, there is one permitted composting facility in the District. This facility accepts grass and

CHAPTER 4.0

CONSIDERATION OF THE SOLID WASTE HIERARCHY

leaves from commercial or governmental entities only. As previously stated under Source Reuse, yard trimmings account for 25% of the waste stream and diverting those materials from disposal could be significant. District businesses report recycling of materials within their own operations such as converting waste concrete to road aggregate or composting VW. Anecdotal information suggests the land clearing debris (LCD) generated in the District is recycled by the generation of wood chips for fuel or mulch, firewood and saw logs.

4.4.2 Future Considerations

- Establish a DOC in Purcellville to serve residents in the western portion of the District.
- Establish recycling opportunities for businesses in the developing sections of the District.
- Establish a monthly HHW collection program at a stationary location to meet the needs of District residents.
- Establish waste oil collection areas in the more populated sections of the District.
- Provide adequate yard waste management facility capacity to meet the code revisions which State yard waste will be collected as a recyclable material starting July 1, 2003.
- Consider a regional materials recovery facility (MRF) to process recyclable materials including C&D and business type wastes.
- Establish regular collection programs or sites for oil filters, fluorescent lamps/tubes, and electronics.

4.5 Resource Recovery

Also known as Waste-to-Energy (WTE), this level of the solid waste management hierarchy uses municipal waste combustion to produce energy. Ash is a by-product of this program and is usually landfilled. The County considered a multi-jurisdictional Waste-To-Energy project in the 1980's. The project was never developed due to economics and political disagreements. Current regulatory requirements on air emissions and flow control make this option cost prohibitive.

4.5.1 Current Status

Currently, some of the HHWs generated in District are fuels blended and transported to industrial kilns as an alternative fuel. A portion of the District's MSW is transported to a WTE in the Hampton Roads region of Virginia.

4.5.2 Future Considerations

Flow control measures and strict compliance with the Clean Air Act would make this option cost prohibitive. The ash generated as a by-product usually must be

CHAPTER 4.0

CONSIDERATION OF THE SOLID WASTE HIERARCHY

landfilled, may require analytical testing to determine that the ash is not a hazardous waste, and could require landfilling or disposal at a hazardous waste landfill.

4.6 Incineration

Incineration is next on the hierarchy and is similar to WTE but energy is not generated as a result of the burn. Ash is produced, however, and may require analytical testing to determine whether the ash is hazardous in which case the ash must be disposed at a hazardous waste landfill.

4.6.1 Current Status

Currently, some of the HHWs generated in the District are incinerated for disposal (poisons and pesticides). Regulated medical wastes (RMW) are typically incinerated or autoclaved prior to disposal.

4.6.2 Future Considerations

Compliance with the Clean Air Act makes this option cost prohibitive and does not appear to be a viable option for the District.

4.7 Landfilling

A sanitary landfill is an engineered waste burial facility designed to minimize the possibility of environmental degradation to surface and ground water, soil and air. Landfills are designed and constructed with liners according to specifications set forth in Federal and State law and regulations. Operating landfills must maintain active environmental monitoring and media management programs such as leachate and gas extraction systems. Landfilling requires daily operation and maintenance of the active disposal area and also requires closure construction and post closure care for the inactive or closed areas. Landfilling is necessary to manage non-recyclable and noncombustible wastes and is the only actual waste "disposal" method in the hierarchy. If waste cannot be recycled, incineration, then sanitary landfilling, are the next preferred methods of treatment. While landfilling is the least preferred method in the hierarchy, it remains the most prevalent in many jurisdictions because it is the cheapest method of disposal.

4.7.1 Current Status

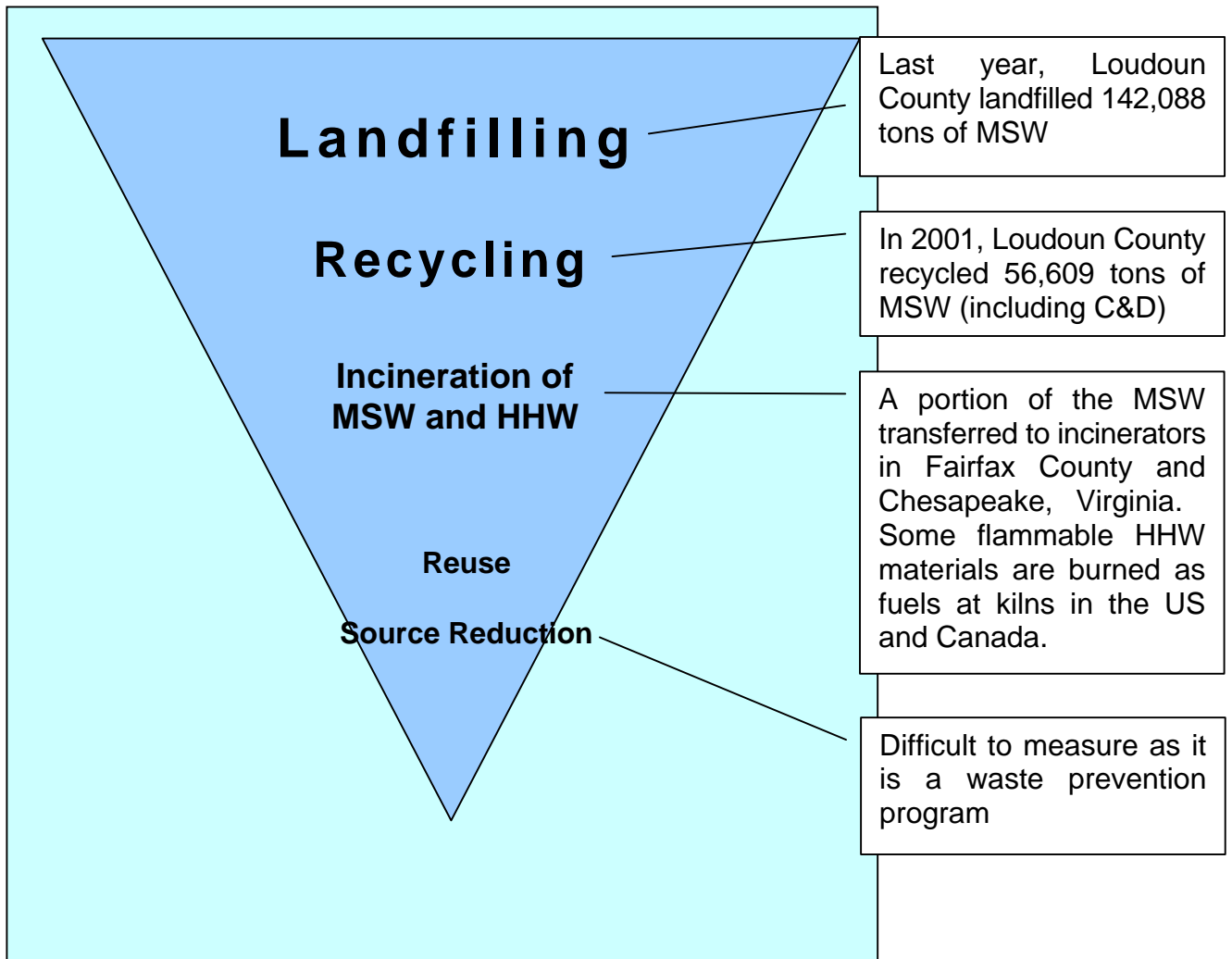
Based on information in solid waste collector/transporter reports and landfill operations reports, 68% of the MSW generated in LCSWMPD is landfilled and 32% is incinerated in Fairfax County. Of the waste that is landfilled, 59% of the waste is transported out of the District to Southeastern Virginia and approximately 9% is disposed of at the LCSWMF.

CHAPTER 4.0 CONSIDERATION OF THE SOLID WASTE HIERARCHY

4.7.2 Future Considerations

Virginia's landfill capacity is estimated at 32 years based on a 2002 report from The Department of Environmental Quality (DEQ). In 2001, the County completed construction of an additional cell that, at current waste flow, will last until 2006.

Figure 4-2: Loudoun County's Waste Hierarchy



CHAPTER 5.0 FINDINGS AND OUTCOMES OF THE SWMP COMMITTEE

5.0 COMMITTEE FINDINGS

5.1 Committee Discussion of Issues

Following the presentation of the background information waste generation and the current solid waste system, the Committee made certain findings regarding the state of the current solid waste management system, and initiatives to ensure the provision of adequate solid waste services in the future.

The process by which the Committee arrived at these decisions is described in detail in Chapter 9, Section 9.2.4 of this document. The information was grouped in three categories: Emergent Trends, Solid Waste Management System Deficits, and Recycling. Agendas and agenda items from each meeting are included in **Appendix C** and meeting summaries are included in **Appendix D**.

5.2 Summary of Committee Findings

The following statements reflect the findings of the Committee. They are based on the discussions of the background information provided, and the issues and options identified by staff, Committee members, and participants in the various meetings. They have been grouped under five headings: collection, processing and disposal, recycling, environmental protection, and public information and policy.

Solid Waste Collection

- The County will set performance standards for the provision of solid waste collection services and regulate the service providers through a permitting process.
- The provision of solid waste collection services by the private sector is adequate at this time to address the collection requirements in the Towns and more developed areas of the County.
- The Towns may use contracted services or determine other means of collection at their discretion.
- Incentives should be provided to encourage new minor collectors to enter the market and to encourage existing minor collectors to continue to provide collection services to the rural areas of the County.
- The County will continue to collect solid waste generated at public schools and other County Government Sites.
- Solid waste service districts to ensure adequate collection services are not needed in the District at this time.

CHAPTER 5.0

FINDINGS AND OUTCOMES OF THE SWMP COMMITTEE

Processing and Disposal

- The County should maintain the publicly owned and operated solid waste management facility to provide an important disposal option and to protect the County, residents, and businesses from relying on sole source providers of solid waste services.
- The financial base of the County Solid Waste Management System should be improved by adopting an operating policy and fee structure that would provide a more revenue neutral service.
- The County should maintain the capital construction plans for Phase III to ensure adequate disposal capacity at the County SWMF.
- The District will continue to rely on private sector transfer station facilities and disposal outside the County as its primary disposal strategy.
- The District members did not recommend provisions for additions to existing processing or disposal facilities including transfer stations at this time.
- The District members do recommend that an assessment of available processing and disposal capacity be made every two years as part of the biennial plan review and that adjustments be made to the plan as warranted by this assessment.
- Efforts should be made to ensure that in-county generated waste be given top priority at privately owned and operated processing and disposal facilities.

Recycling and Reuse

- Full implementation of the recently adopted provisions of Chapter 1084 and 1086 should ensure that the District will meet the Virginia mandated 25% recycling rate. The District will monitor progress toward this requirement and make adjustments as required.
- The District membership should develop proactive workable approaches to meeting anticipated increases in mandated recycling rates.
- An increase in the current level of program effort is needed to sustain compliance with existing mandated recycling rates.
- The method for calculating the recycling rate will be the Virginia-approved method.
- The target recycling rate for the District will be the State-mandated rate.
- The District will not exclude yard waste recycled from the rate calculation.

CHAPTER 5.0

FINDINGS AND OUTCOMES OF THE SWMP COMMITTEE

- Compliance with recycling requirements is improved with simplified and consistent requirements throughout the District.
- The Towns will support the provisions of the County recycling requirements to the extent possible fiscally.
- A recycling dropoff center is needed in the Western Loudoun area to provide reasonable access and recycling opportunities to Loudoun residents and businesses without curbside pickup.
- The Town of Leesburg will continue to operate dropoff centers in the Town to ensure the availability of recycling opportunities to those without curbside collection services.
- OSWM should work within the land development referral process to ensure that adequate facilities are included in new developments to foster compliance with new recycling requirements.
- The deficits in the recycling infrastructure should be addressed by the development of a public/private recycling transfer depot at the County Solid Waste Management Facility.
- The operations of the existing recycling dropoff centers should not be reduced.
- Enlist a non-governmental organization (NGO) to develop and sustain a waste reuse and exchange program.
- The District should not pursue a “Too Good To Waste Place” at this time due to the cost and logistical concerns attendant to operating such a facility.
- Consider the development of a web-based effort for waste exchange.
- Future recycling dropoff centers should be included in the capital projects planning for regional government sites.
- The County will not fully implement the provisions of the County recycling policy with regard to dropoff centers due to present fiscal constraints.
- The County should continue to provide the special recycling services for tires, batteries, waste oil, antifreeze, and scrap metal at the solid waste management facility.

CHAPTER 5.0

FINDINGS AND OUTCOMES OF THE SWMP COMMITTEE

Environmental Protection

- Inconsistencies were identified between the County Zoning Ordinance and the County Solid Waste Management Facility Regulations as applied to the solid waste industry. Revisions to both the Zoning Ordinance and Solid Waste regulations should be adopted as appropriate to ensure that the County is consistent in its regulatory approach.
- The County will continue to provide for protection of the environment and public health and safety through the regulation of private solid waste management facilities.
- The County should continue to provide the fee waivers for the cleanup of farm dumps and roadside litter.
- The frequency of special waste collection programs for Household Hazardous Waste should be increased to once a month.
- The special waste programs for waste oil, antifreeze, and batteries should be expanded to central locations in the east and western portions of the County.
- A dedicated HHW collection site and building is not needed at this time.
- The County should maintain the Clean Waste Program that provides options to small business to properly dispose of potentially hazardous materials in a safe and cost-effective manner.
- Appropriate provisions in Chapter 1080 and the Zoning Ordinance should regulate the dumping of waste dirt.
- Appropriate provisions in Chapter 1080 and the Zoning Ordinance should regulate processing of topsoil.
- The County should amend appropriate ordinances as necessary to prohibit the burning of any municipal solid waste.
- The County should amend appropriate ordinances as necessary to prohibit the burning of vegetative waste and construction and demolition waste generated off-site.
- The County should amend appropriate ordinances as necessary to prohibit the burning of all solid waste and vegetative waste during summer months and whenever air pollution levels constitute a potential health threat.
- The existing environmental compliance systems at the County solid waste management facility should be maintained.

CHAPTER 5.0

FINDINGS AND OUTCOMES OF THE SWMP COMMITTEE

Solid Waste Planning and Policy

- The County should take reasonable steps to ensure an adequate response to solid waste/debris disasters.
- The District will rely on disposal and recycling as its two most cost-effective methods of solid waste management. Incineration is not technically or fiscally feasible for the District at this time.
- OSWM will act as the District agent for the Loudoun County Solid Waste Management Plan, and will be responsible for keeping all member jurisdictions apprised of status and emergent issues.
- The County solid waste management staff (OSWM) will be available to all participating members to provide technical information and support as requested by the members.
- Technical staff should conduct regular audits of solid waste conditions in the District to assess the adequacy of the plan in meeting the solid waste management needs of the District.
- The plan will include all information and elements required to comply with the Virginia Solid Waste Management Regulations.
- The District should improve the quality of information available on construction waste by requesting regional planning agencies to conduct an assessment on generation, disposition, and disposal capacity.
- The District should conduct a biennial assessment of the Plan to identify and address any issues that might negatively impact the provision of adequate solid waste management services to residents and businesses.

CHAPTER 6.0

OBJECTIVES FOR THE SOLID WASTE MANAGEMENT PLAN

6.0 OBJECTIVES

The goals of the Solid Waste Management Plan are stated in Chapter 1 and provide a structure for evaluating the plan's success. The LCSWMPD has set forth these goals to demonstrate that it has fulfilled its responsibility in assessing and planning for Loudoun County's solid waste management needs. This Chapter outlines more specific objectives related to the goals and establishes a background for Chapter 7, Implementation of the Solid Waste Management Plan, which provides greater detail as to how the Goals and Objectives will be accomplished.

The chapter is structured by re-stating the Goals found in Chapter 1 followed by the related supporting objectives.

Goal 1:

Establish a dynamic planning process and document that meets Virginia Statutory and Regulatory requirements, that fosters public participation, and that ensures that the District's solid waste management needs will be met.

Related Objectives:

- A) Identify and project for the planning period the volume and types of waste generated in Loudoun County.
- B) Identify the solid waste management system components that will handle all non-hazardous solid waste generated in Loudoun County.
- C) Maintain a comprehensive, integrated solid waste management approach that addresses collection, transportation, and disposal. The approach will address the Solid Waste Hierarchy elements of source reduction, reuse, recycling, resource recovery, incineration, and landfilling, in proportions appropriate for the District's needs.
- D) Establish a single point of contact for provision and management of technical solid waste information in the District to support future planning decisions and to comply with State reporting requirements.
- E) Provide a framework that will allow for a periodic review and evaluation of the recommendations and guidelines set forth in the solid waste management plan to ensure that the plan remains responsive to District needs.

CHAPTER 6.0
OBJECTIVES FOR THE SOLID WASTE MANAGEMENT PLAN

- F) Foster the participation and involvement of the general public in solid waste management planning and implementation.
- G) Establish an emergency solid waste management plan for disasters.

Goal 2:

Identify and foster mechanisms to ensure that adequate solid waste collection services are available throughout the District.

Related Objectives:

- A) Identify collection system components that currently meet the District's needs.-
- B) Identify a schedule for action to sustain the current collection system components that meet the District's needs.
- C) Identify approaches to address collection and transportation system deficits.
- D) Implement Chapter 1084 of the County Codified Ordinance (Solid Waste Collection and Transportation) that establishes minimum standards and requirements for collection services.

Goal 3:

Identify and provide for the availability of facilities to ensure that adequate options for solid waste disposal are available throughout the District.

Related Objectives:

- A) Identify disposal system components that meet the District's current needs.
- B) Identify a schedule for action to sustain disposal system components that currently meet the District's needs.
- C) Identify approaches to address the system and facility deficits.
- D) Sustain adequate transfer facility capacity for moving MSW out of the County for disposal.

CHAPTER 6.0

OBJECTIVES FOR THE SOLID WASTE MANAGEMENT PLAN

- E) Sustain adequate transfer facility capacity for moving C&D waste out of the County for disposal.
- F) Maintain the Loudoun County Solid Waste Management Facility (LCSWMF) as a disposal option for solid wastes that are not desired or permitted at a private transfer facility, to provide emergency backup to the primary disposal option, and to provide a disposal option for residents and businesses who can not, or choose not to, obtain collection service.
- G) Continue the policy that any landfill in Loudoun County, because of the potential threat to the environment, be publicly owned and operated as a revenue-neutral entity, either by the County or in legal/contractual relationships under which the County retains control of the facility.

Goal 4:

Identify, implement, and/or maintain programs for ensuring that solid wastes are managed in accordance with Federal and State laws and regulations in a manner that protects public health, safety, and the environment.

Related Objectives:

- A) Protect the environment by fulfilling the laws, regulations, ordinances and other requirements as set forth by the County, Commonwealth of Virginia, and U.S. EPA.
- B) Maintain the environmental management and monitoring systems at the Loudoun County Solid Waste Management Facility.
- C) Ensure remediation of contamination found to exist at any privately or publicly owned solid waste management facility in accordance with the Virginia Department of Environmental Quality standards.
- D) Maintain enforcement of Chapter 1080 of the County Codified Ordinances, which provides for minimum standards and requirements for solid waste management facilities and regulates open dumping.
- E) Regulate the burning of solid and/or vegetative waste and the processing and/or disposal of waste dirt to protect the environment.

CHAPTER 6.0

OBJECTIVES FOR THE SOLID WASTE MANAGEMENT PLAN

Goal 5:

Develop and sustain a Countywide program that will achieve or exceed the State's mandatory recycling rate.

Related Objectives:

- A) Establish minimum standards and requirements for recycling that are achievable and understandable.
- B) Ensure compliance with, and enforcement of, Chapters 1084 and 1086 of the County Codified Ordinance, which establish minimum standards and requirements for recycling.
- C) Maintain curbside recycling services through private sector contracted services with Towns, Homeowner and Commercial Property Associations, and individual subscriptions.
- D) Maintain the existing system of Recycling DOCs to supplement curbside recycling and to provide for material collection not provided by curbside services.
- E) Provide recycling opportunities to the public for special wastes including scrap metal, appliances, tires, electronics and other wastes that require special handling.
- F) Ensure that Governments lead by the example in effective recycling.
- G) Ensure that adequate recycling infrastructure exists to support recycling programs.

Goal 6:

Provide safe recycling and disposal options for special wastes that may pose harm to the environment and/or to public health and safety.

Related Objectives:

- A) Conduct Household Hazardous Waste collection activities for residents.
- B) Conduct Clean Waste collection activities so that Conditionally Exempt Small Quantity Generators (CESQG) have a low-cost, safe

CHAPTER 6.0
OBJECTIVES FOR THE SOLID WASTE MANAGEMENT PLAN

disposal option for hazardous waste generated in qualifying quantities by business and commercial enterprises.

- C) Provide collection services for special wastes including motor oil, antifreeze, tires, batteries, electronics and other wastes that require special handling and transport and/or that contain hazardous materials.

Goal 7:

Develop an Implementation Plan that sets forth how the Objectives of the SWMP will be met.

Related Objectives:

- A) Identify actions to be taken
- B) Identify responsible parties to take action
- C) Identify milestones for accomplishing actions
- D) Identify benefits or outcomes for action
- E) Identify funding sources for action

CHAPTER 7.0 IMPLEMENTATION OF THE SOLID WASTE MANAGEMENT PLAN

7.0 IMPLEMENTATION STRATEGY

The following implementation strategy outlines the actions needed to implement the Goals listed in Chapter 1 and the Objectives outlined in Chapter 6. The implementation strategy discusses the current system elements that will continue, the plan's new initiatives, the responsible party or parties, the milestones or deadlines for accomplishing the objectives, the expected benefits and outcomes, and the anticipated sources of funding. This solid waste management plan (SWMP) has been designed to respond to the District's 20-year solid waste management needs by being proactive, flexible, and responsive.

This chapter reiterates the Objectives found in Chapter 6 (identified by a Goal number and an Objective letter) and then lists the related supporting implementation strategies.

7.1 GOAL 1

7.1.1 Objective A: Identify and project for the planning period the volume and types of waste generated in Loudoun County.

This information is presented in Chapter 2 of this document.

7.1.2 Objective B: Identify the solid waste management system components that will handle all non-hazardous solid waste generated in Loudoun County.

This information is presented in Chapter 3 of this document.

7.1.3 Objective C: Maintain a comprehensive, integrated solid waste management approach that addresses collection, transportation, and disposal. The approach will address the Solid Waste Hierarchy elements of source reduction, reuse, recycling, resource recovery, incineration, and landfilling, in proportions appropriate for the County's needs.

A discussion of the waste hierarchy is presented in Chapter 4 of this document. The Loudoun County Solid Waste Management Planning District (LCSWMPD) members rely on landfill disposal as their primary solid waste management option and recycling as the secondary option.

Reuse and source reduction will be promoted through various public outreach and educational programs as an integral component of the overall solid waste management system. Some reuse and reduction efforts are in effect in the District. Reuse of vegetative waste (VW) and waste concrete are the most notable examples of reuse. The District members will seek opportunities with, and help from, the private sector in promoting source reduction.

CHAPTER 7.0 IMPLEMENTATION OF THE SOLID WASTE MANAGEMENT PLAN

Incineration and waste-to-energy (WTE) are not cost-effective for the District. Resource recovery alternatives have historically been explored with neighboring jurisdictions; however, no economically viable resource recovery options are available for the District to pursue at this time.

7.1.4 Objective D: Establish a single point of contact for provision and management of technical solid waste information in the District to support future planning decisions and comply with State reporting requirements.

The County's Office of Solid Waste Management (OSWM) will act as the District's agent for collecting, maintaining, compiling, analyzing and reporting basic solid waste management information. OSWM will receive information from District members and from solid waste facilities and collectors permitted by the County. OSWM also will provide information as requested by District members and the public.

OSWM will collect all available information on solid waste generation, recycling, and disposal and will prepare a written annual solid waste report summarizing all information. The report will be completed by March 1 of each year for the preceding calendar year and will be distributed to all District members.

OSWM will prepare and submit the annual solid waste and recycling reports according to requirements in the Virginia Solid Waste Management Act and the Virginia Solid Waste Management Regulations 9 VAC 20-130-165 and 9 VAC 20-80-115 (Waste information and assessment program).

OSWM will provide technical assistance to the incorporated Towns regarding solid waste matters upon request.

OSWM staff will continue to serve as a solid waste information clearinghouse and will provide frontline customer service effort in response to citizen requests for solid waste information. These requests typically regard solid waste collection in the towns, homeowners' associations (HOA's), facilities, collectors, types of materials recycled, locations of recycling dropoff centers (DOCs), household hazardous waste events, and landfill operations.

7.1.5 Objective E: Provide a framework that will allow for a periodic review and evaluation of the recommendations and guidelines set forth in the solid waste management plan to ensure that the plan remains responsive to District needs.

OSWM will conduct a biennial plan audit that will test the validity of the assumptions and waste generation projections contained in the LCSWMP and will assess the status of the Implementation Plan components. OSWM will provide a biennial report on the previous two years (in odd-numbered years) to District members regarding the results of the two most recent audits and

CHAPTER 7.0

IMPLEMENTATION OF THE SOLID WASTE MANAGEMENT PLAN

recommendations for issues that may require attention. This report will be provided to District members by April 1 for the reporting period ending the preceding December 31.

The District will monitor municipal solid waste (MSW) disposal capacity availability and demand and will propose adjustments as needed for the life of this plan during the proposed biennial audit process.

7.1.6 Objective F: Foster the participation and involvement of the general public in solid waste management planning and implementation.

Chapter 9 of the SWMP outlines the planning process and provides details on the public information, outreach and opportunities for public comment and participation in the plan's formation.

OSWM will continue its current role in providing public information, educational activities and materials including printed materials, purchased advertising, joint promotions with other agencies and organizations, educational programs to Loudoun County schools, information booths at public events and facilities, public speaking engagements and landfill tours.

7.1.7 Objective G: Establish an emergency solid waste management plan for disasters.

The planning process identified the District's lack of an emergency solid waste management plan for use in the event of a disaster. Emergency preparedness is necessary to protect public safety and to help the solid waste management system prepare to absorb the excess waste volumes created in an emergency or disaster.

To address this issue, the County will take action to position the District for disaster or emergency response. By January 1, 2004, the County will:

1. Seek DEQ pre-approval of an emergency solid waste/debris site(s);
2. Establish mutual aid agreements with other jurisdictions in Northern Virginia for disaster response; and,
3. Include solid waste management planning in the County's emergency management plan.

OSWM will coordinate and facilitate these actions.

CHAPTER 7.0 IMPLEMENTATION OF THE SOLID WASTE MANAGEMENT PLAN

7.2 GOAL 2

7.2.1: Objective A: Identify collection system components that currently meet the District's needs.-

The Committee believes that the current collection system provided by the private sector is generally responsive to the needs of the District. Changes in requirements on collectors to increase recycling rates have been identified and are discussed in the recycling objectives. Several members of the collection industry advised the Committee that there were barriers to competition in the collection market. These barriers result from a combination of the single private sector transfer station and the tipping fees at the County SWMF which are higher than rates charged at other facilities in proximity to the County.

The Committee also expressed concerns regarding the sustainability of the rural collection system due to the number of collectors that are near or over retirement age.

7.2.2: Objective B: Identify a schedule for action to sustain the current collection system components that meet the District's needs.

District members will rely on private sector waste collection service providers for residential and business recycling and trash collection. The Towns may use contracted services or other means of providing for collection at their discretion.

Service contracts in the District will continue to be direct contracts between service providers and customers. HOAs will continue to act as contracting agents for association members. Costs will be borne by the customer in the form of taxes in the incorporated towns, and in the form of homeowner association dues or subscription fees in unincorporated areas of the District.

The County government will continue to collect solid waste and recyclables from public schools and other County buildings.

When using contracted services to provide collection of solid waste and recycling, Towns will use contractual terms and conditions to ensure that minimum collection service levels are met in their jurisdictions.

Private roll-off service companies will continue to conduct collection of construction and demolition waste (C&D) through direct contracts between the service company and the customer.

CHAPTER 7.0 IMPLEMENTATION OF THE SOLID WASTE MANAGEMENT PLAN

7.2.3: Objective C: Identify approaches to address collection and transportation system deficits.

District members recommend that the Board of Supervisors revise the Landfill disposal rates to help sustain adequate solid waste collection services in rural areas.

As part of the phased implementation of Chapter 1084 revisions passed in 2002, the County will regulate C&D collectors and will collect information on C&D generation and disposal required by County Ordinance and by DEQ.

7.2.4: Objective D: Implement Chapter 1084 of the County Codified Ordinance (Solid Waste Collection and Transportation) that establishes minimum standards and requirements for collection services.

The County has set and will enforce minimum standards of service required of collection services providers under Chapter 1084 (Solid Waste Collection and Transportation). Collector inspections and reporting will be conducted under Chapter 1084. All collector regulatory activities will be funded through annual budget appropriations and costs will be partially offset through permitting fees.

OSWM is responsible for administering the County solid waste ordinances. The Towns may elect to co-adopt some or all of the County ordinances regulating collection and may request that OSWM enforce these provisions.

GOAL 3

7.3.1 Objective A: Identify disposal system components that meet the District's current needs.

The Towns and County will continue to rely on landfill disposal as their primary solid waste management technique. The Committee did not identify any fundamental flaws with the current system that is a mix of private sector facilities and a public facility. The majority of solid waste generated in the County will be delivered to private transfer stations for transport out of the County to privately owned and operated landfills for disposal.

7.3.2 Objective B: Identify a schedule for action to sustain collection system components that currently meet the District's needs.

The Committee did not identify requirements for new facilities to serve the District at this time. The current transfer system capacity is sufficient for meeting the District's needs for both MSW and construction waste. Available vegetative waste management facility capacity is adequate for District requirements. The County SWMF will require one or more disposal cells (dependent on demand)

CHAPTER 7.0

IMPLEMENTATION OF THE SOLID WASTE MANAGEMENT PLAN

during the planning period. Schedules and funding for these are described in Chapter 8.

7.3.3 Objective C: Identify approaches to address the system and facility deficits.

The only deficit or issue identified in the disposal component were those related to sustaining rural collection, and improving competition in the collection market serving the developed portion of the County. These issues were addressed by the Committee's recommendation to reduce the tipping fee to achieve a more revenue neutral facility operation.

7.3.4 Objective D: Sustain adequate transfer facility capacity for moving MSW out of the County for disposal.

The County will continue to permit sufficient MSW transfer capacity to manage the entire MSW disposal demand at private facilities at a threshold of 125% of the disposal demand for the District, implemented through the provisions in Chapter 1080 of the Codified Ordinances of Loudoun County.

Based on this policy and Chapter 1080, adjustments in the maximum permit limits for private MSW transfer facilities contained in Chapter 1080 will not require adjustment prior to 2010.

OSWM will continue to monitor capacity availability and demand and will propose adjustments as needed for the life of this plan.

7.3.5 Objective E: Sustain adequate transfer facility capacity for moving C&D waste out of the County for disposal.

The District has sufficient C&D transfer capacity to address current and projected generation for the entire 20-year planning period; however, disposal capacity is unknown. This uncertainty suggests a need for a C&D waste characterization, generation and capacity study. There is currently no policy for limiting C&D transfer capacity in Chapter 1080.

Currently, there are several facilities for managing C&D, with additional C&D facilities scheduled to become operational in near future. Phased implementation of permitting the C&D collectors, new reporting requirements in Chapter 1084, and the proposed C&D study should provide assessment tools for determining what changes may or may not be necessary to deal with C&D waste.

District members will request that the Northern Virginia Regional Commission (NVRC) or the Metropolitan Washington Council of Governments (MWCOG) conduct a regional C&D waste generation and characterization study, to be completed by December 2004 to assess C&D disposal demand and supply.

CHAPTER 7.0 IMPLEMENTATION OF THE SOLID WASTE MANAGEMENT PLAN

Pending receipt of the information from the proposed C&D generation and disposal capacity study, the District will assess the need for further action or initiatives as appropriate for C&D.

7.3.6 Objective F: Maintain the Loudoun County Solid Waste Management Facility (LCSWMF) as a disposal option for solid wastes that are not desired or permitted at a private transfer facility, to provide emergency backup to the primary disposal option, and to provide a disposal option for residents and businesses who can not, or choose not, to obtain collection service.

Solid waste programs operated by the County will be paid through the General Fund. All construction costs for new cells and closure activities are funded by the County's General Fund and are partially offset by landfill tipping fees. In response to the constrained fiscal budget, the LCSWMPD is recommending that the Board of Supervisors amend the Landfill policy (**Appendix K**) to promote a more revenue-neutral facility while conserving landfill capacity.

Construction projects scheduled in the County's Capital Improvement Plan (CIP) are based on current disposal demand trends. OSWM will complete construction plans and bid specifications for the next cell (IIIB) of the LCSWMF by the end of FY2004 and begin its construction in 2005. A schedule for subsequent design and construction is dependent on disposal demand and will be monitored as part of the biennial solid waste management plan audit.

Upon construction, the final cell (IIIC) will provide an additional seven years of capacity at current demand rates. Future development of the adjacent county-owned Woods Road property will also provide multiple decades of disposal capacity.

7.3.7 Objective G: Continue the policy that any landfill in Loudoun County, because of the potential threat to the environment, be publicly owned and operated as a revenue-neutral entity, either by the County or in legal/contractual relationships under which the County retains control of the facility.

The only landfill in the County is the County SWMF that is owned and operated by the County. The objective of County ownership is met at this time. If the Board of Supervisors accepts the Committee's recommendation to revise the landfill tipping fees, the revenue-neutrality objective will also be met.

7.4 GOAL 4

7.4.1 Objective A: Protect the environment by fulfilling the laws, regulations, ordinances and other requirements as set forth by the County, Commonwealth of Virginia, and U.S. EPA.

CHAPTER 7.0

IMPLEMENTATION OF THE SOLID WASTE MANAGEMENT PLAN

The County is in compliance with all laws regulations, and ordinances at the LCSWMF. Through Chapter 1080, the County helps to ensure that other solid waste management facilities are compliant with all such requirements.

7.4.2 Objective B: Maintain the environmental management and monitoring systems at the Loudoun County Solid Waste Management Facility.

These environmental management systems are funded in the OSWM operational budget with annual appropriation from the County's general fund. The systems in place are compliant with all State regulations and funding is proposed to continue through the General Fund.

7.4.3 Objective C: Ensure remediation of contamination found to exist at any privately or publicly owned solid waste management facility in accordance with Virginia Department of Environmental Quality standards.

The County has set aside CIP funds to address an issue at the LCSWMF and has filed all documents as required by State regulations. Final disposition of this matter is pending DEQ review and approval. Facility permitting, compliance and enforcement activities through Chapter 1080 include financial assurance mechanisms to help fund cleanup and/or contamination liabilities. These regulatory efforts help ensure that both public and private solid waste management facilities are complaint with all requirements.

7.4.4 Objective D: Maintain enforcement of Chapter 1080 of the County Codified Ordinances, which provides for minimum standards and requirements for solid waste management facilities and regulates open dumping.

The County will provide local permitting and regulation of the LCSWMF and private solid waste management facilities under Chapter 1080 of the County Codified Ordinances in order to supplement Federal and State regulations and to protect human health and safety and the environment.

Routine inspections and facility reporting will be conducted. All facility regulatory activities will be funded through annual budget appropriations and costs will be partially offset through permitting fees.

The County will respond to, investigate, and resolve dump complaints and provide fee waivers to support cleanup of roadsides, illegal dumps, and farm dumps, when appropriate. The Towns may adopt their own ordinances and enforce them or co-adopt the County ordinances and request enforcement by OSWM.

CHAPTER 7.0 IMPLEMENTATION OF THE SOLID WASTE MANAGEMENT PLAN

7.4.5 Objective E: Regulate the burning of solid and/or vegetative waste and the processing and/or disposal of waste dirt to protect the environment.

The District members have recommended that the Board of Supervisors amend Chapter 1080, the Zoning Ordinance, and other appropriate County ordinances to:

- prohibit burning of MSW;
- prohibit the burning of vegetative waste and CDD waste generated off-site;
- prohibit the burning of any solid waste or vegetative waste in the months of June, July, and August;
- restrict unauthorized dumping of waste dirt;
- regulate surface piles of waste dirt; and
- regulate soil processing.

OSWM will work with appropriate County agencies to develop text for consideration by the Board of Supervisors.

7.5 GOAL 5

7.5.1 Objective A: Establish minimum standards and requirements for recycling that are achievable and understandable.

The County has established the minimum standards and requirements for residents, businesses, and collectors to ensure County compliance with the State mandated 25 percent recycling rate.

The County and Town members will work towards consistent requirements for recycling and solid waste management in order to enhance the public's understanding of, and compliance with, recycling requirements.

7.5.2 Objective B: Ensure compliance with and enforcement of Chapters 1084 and 1086 of the County Codified Ordinance, which establish minimum standards and requirements for recycling.

OSWM has developed an implementation plan for these provisions that have phased compliance dates. The County is working with the collection industry, and HOAs to ensure understanding of the requirements.

7.5.3 Objective C: Maintain curbside recycling services through private sector contracted services with Towns, Homeowner and Commercial Property Associations, and individual subscriptions.

CHAPTER 7.0

IMPLEMENTATION OF THE SOLID WASTE MANAGEMENT PLAN

Under Chapter 1084, collectors are required to provide curbside recycling services to customers in the County. The incorporated Towns will continue their curbside recycling activities and any business waste and DOCs, where applicable.

7.5.4 Objective D: Maintain the existing system of Recycling DOCs to supplement curbside recycling and to provide for material collection not provided by curbside services.

The County will continue to fund and operate eight centrally located DOCs in accordance with the BOS recycling policy (**Appendix M**) for residents who do not have curbside recycling pickup. The Town of Leesburg will continue to fund and operate three recycling DOCs to provide opportunities to those without curbside recycling collection.

7.5.5 Objective E: Provide recycling opportunities to the public for special wastes including scrap metal, appliances, tires, electronics and other wastes that require special handling.

The County currently provides a collection site (the County SWMF) and services for appliances and scrap metal, tires, electronics and other wastes that require special handling and transport. The objective is currently met, provided the support funding from the General Fund is continued.

The County will continue collection of other materials, including Christmas trees, computers, and other consumer electronics with coordinated special events.

7.5.6 Objective F: Ensure that Governments lead by example in effective recycling.

The County will maintain its mixed paper recycling program in its offices.

The County will follow Chapter 1086.13 of the Loudoun County Solid Waste Reduction and Recycling Ordinance, which provides for a 10% price preference for the purchase of recycled paper products.

7.5.7 Objective G: Ensure that adequate recycling infrastructure exists to support recycling programs.

District members recommend that the Board of Supervisors revise the comprehensive countywide joint-use public facilities plan to incorporate DOCs in all appropriate public facility sites.

District members recommend that the Board of Supervisors develop a capital improvement and funding schedule to construct and operate a DOC in the Purcellville area, replacing three DOC sites lost in 1995.

CHAPTER 7.0 IMPLEMENTATION OF THE SOLID WASTE MANAGEMENT PLAN

OSWM will work with the County Land Use Referral process to ensure that recycling area standards are set and used in new developments.

The County will continue to permit two materials recovery facilities (MRFs) that handle a portion of the County's source separated recycling in accordance with Chapter 1080 of the County Codified Ordinances.

The Towns and the County will support private sector vegetative waste processing and yard waste composting to enhance the District's recycling efforts.

The Towns and the County recommend that the Board of Supervisors pursue a recyclables transfer station—to be located at the LCSWMF and operated as a private/public partnership—to address the lack of recycling infrastructure.

Any future sustainable private sector recycling or other public-private recycling initiatives will be considered by the LCSWMPD to achieve recycling goals and to move the District's Solid Waste Management system higher on the waste hierarchy.

7.6 GOAL 6

7.6.1 Objective A: Conduct Household Hazardous Waste collection activities for residents.

District members recommend that the Board of Supervisors provide funding to expand the household hazardous waste (HHW) program to up to twelve annual events by fiscal year 2005 in order to increase the opportunities and locations for residents to dispose of HHW properly. The events should be distributed geographically throughout the County.

7.6.2 Objective B: Conduct Clean Waste collection activities so that Conditionally Exempt Small Quantity Generators (CESQG) have a low-cost, safe disposal option for hazardous waste generated in qualifying quantities by business and commercial enterprises.

The County offers this service on a semi-annual basis at this time. The objective is currently met, provided the support funding from the General Fund is continued.

7.6.3 Objective C: Provide collection services for special wastes including motor oil, antifreeze, batteries, and other wastes that require special handling and transport and/or that contain hazardous materials.

The County currently provides a collection site (the County SWMF) and services for motor oil, waste antifreeze, batteries, and other wastes that require special

CHAPTER 7.0

IMPLEMENTATION OF THE SOLID WASTE MANAGEMENT PLAN

handling and transport. The objective is currently met, provided the support funding from the General Fund is continued.

As a new initiative, the County will expand waste oil and other special waste collection to a regional site in the Western and Eastern parts of the County by fiscal year 2005, subject to available funding.

7.7 GOAL 7

For each of the objectives, the following information will be provided.

7.7.1 *Objective A: Identify actions to be taken.*

7.7.2 *Objective B: Identify responsible parties to take action.*

7.7.3 *Objective C: Identify milestones for accomplishing actions.*

7.7.4 *Objective D: Identify benefits or outcomes for action.*

7.7.5 *Objective E: Identify funding sources for action.*

CHAPTER 8.0

FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

Part I: Funding the Current Solid Waste Management System

8.0 INTRODUCTION

The Solid Waste Management Hierarchy places waste reduction at the top of the hierarchy. Waste reduction is the only part of the hierarchy that poses real savings or cost avoidance as there is no cost or loss associated with waste that is never generated. The solid waste management system in the Loudoun County Solid Waste Management Planning District (LCSWMPD) is comprised of many components, each with its own streams of revenue and cost. Solid Waste Collection, Transportation, Transfer and Disposal Facilities cost money and are all ultimately funded through rates paid by system users through a monthly collection bill, a Town and/or County resident's annual tax bill, or through a landfill tipping fee for a homeowner or construction contractor.

This chapter identifies, to the extent possible, the LCSWMPD's solid waste management system as a solid waste marketplace. This growing marketplace will continue to generate and consume significant funds for the movement of solid waste from "doorstep to doorstep" in the case where consumers place recyclables at their curbside and then purchase recycled content goods. The flow of funds will also continue to be substantial for moving solid waste from doorsteps to transfer and disposal facilities. Each cost and revenue-generating element of the solid waste management system will be reviewed and aggregated into a profile of this significant sector (estimated at \$35 million annually) of Loudoun's economy. In this chapter, current funding methods are summarized, a facilities construction program is outlined, and options for financing future facilities and system elements are described.

8.1 Private Collection

8.1.1 Individual Residential Collection

A certain portion of households in the District receives solid waste collection services through individual subscriptions with a solid waste collector. Costs vary by location and type of service provided. Typical collection costs for individual subscribers average \$25 per month throughout the District for weekly curbside collection of solid waste. This service generally includes collection of yard waste as well as bulky items and recyclable materials. Fees for services are paid by customers directly to waste management companies.

Another method of individual collection is the householder who transports his or her own solid waste to the Loudoun County Solid Waste Management Facility (LCSWMF). Residents may use this method once a week or once a month, while others may make occasional trips to dispose of special or seasonal wastes.

CHAPTER 8.0

FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

8.1.2 Homeowners' Associations Collection

Homeowners' Associations (HOAs) in Loudoun County typically arrange for collection services for the community they represent through a contract with a permitted solid waste collector. Contract costs are directly related to the number of households being served, the number of collections per week, level of service provided and length of the contract. The largest HOAs in Loudoun County contract for a period of three years in order to negotiate the lowest available price. The average cost for solid waste collection in an HOA in Loudoun County is approximately \$13.50 per month. This service generally includes recycling, special collection services for appliances and other large items, yard waste removal, and in some instances, twice weekly collection.

8.1.3 Commercial Collection

Commercial solid waste collection costs in Loudoun County vary by location, type of material being collected, number of collections per week, and by container size. Businesses such as small restaurants, offices or hardware stores typically pay an average of \$55 per month for a 2 cubic yard dumpster while the costs for a larger 5 cubic yard dumpster average \$150 per month. Trash compactors are used in some areas for collection of solid waste. Trash compactors are transported to a solid waste transfer station (WTS), emptied and then returned. The costs for compactor service vary greatly based on total weight of material, pickup fees of \$120 - \$150 per trip, and the location of the business.

8.1.4 Waste Brokers Collection

Solid waste collection conducted by waste transporters and brokers dealing with special wastes form an unspecified segment of the solid waste collection market. These waste items may be high volumes of cardboard, pallets, industrial or food wastes that are contracted services outside the customary residential and non-residential waste collection service. Specific information on the types and amounts of waste, and the dollar value of this market segment is unknown.

8.1.5 Construction Wastes Collection

Transportation and disposal of C&D in Loudoun County are handled primarily by private contractors and permitted solid waste collectors. The majority of C&D waste generated in Loudoun County is transferred out of the District for disposal at privately owned landfills. Costs for disposal varies greatly depending upon quantity collected, type of container required for transportation and tipping fees at the receiving disposal facility. C&D waste is typically collected in a large open top container that is usually 20 feet in length and 6 to 8 feet tall. A cost is incurred for delivery and pick up of the container and assessed based on the number of tons of material held within. The cost to dispose of a 20-foot container of C&D waste averages \$350 in Loudoun County.

CHAPTER 8.0 FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

8.1.6 Special and Medical Wastes Collection

Loudoun County's regulated special and regulated medical wastes are collected and transported by numerous private service providers. The Loudoun County Office of Solid Waste Management (OSWM) maintains services and vendors for special wastes, including household hazardous wastes (HHWs), oil, tires, lead-acid batteries, scrap metal, and antifreeze. As a result of business consolidation in the past several years, there are few vendors available in Loudoun County to handle many of these materials and a lack of competition. Other materials in these waste categories are transported within, through, and out of the District each day, but the amounts of material and dollar values of the activity are unknown.

8.1.7 Value of the Solid Waste Collection Industry in Loudoun County

The value of the solid waste collection industry in Loudoun County can be approximated by totaling the estimated value of residential collection (which includes individual subscribers, HOAs, and Towns), commercial collection and C&D waste collection activities within the District. These values also include disposal or tipping fees paid by collectors. The current value is estimated at \$34,915,000 annually. **Table 8-1** shows averages on service fees by type of service. The figures provided are approximations, and more details are described below.

Table 8-1: Loudoun County Collection Market

Customer	Average Monthly Cost	Average Yearly Cost	Average Total Cost
Individual Residential	\$25 / household	\$300 / household	\$14,517,000
HOAs	\$13.50 / household	\$162 / household	
Incorporated Towns	\$13.75 / household	\$165 / household	
Commercial Businesses	\$100 / business	\$1,200 / business	\$ 6,410,000
Residential Construction	\$350 / container	2 containers / site	\$ 3,988,000
Non-residential Construction	unknown	unknown	Est. \$10,000,000
Estimated Annual Total of Loudoun County Collection Market			\$34,915,000

CHAPTER 8.0 FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

8.1.7.1 Residential Service

The residential collection of solid waste in Loudoun County has an estimated value of \$14,517,000 per year. This figure is based on an average total cost for disposal of waste of \$209 per household per year and 69,458 households in the County for 2002.¹

Value = (Avg. Monthly HH Cost + Avg. Monthly HOA Cost + Avg. Monthly Town Resident Cost) X 12 Months X Number of Households in the County

8.1.7.2 Commercial/Business Service

The collection of commercial solid waste in Loudoun County has an estimated total annual value of \$ 6,410,000. This figure is based on an average total cost for disposal of waste of \$1,200 per business per year and 5,342 businesses operating in the County.² OSWM staff lacks adequate information to make a reliable estimate and believes this estimate to be much lower than the actual value.

Value = (Average Monthly Business Cost of \$100) x 12 Months x Number of Businesses registered in the County

8.1.7.3 Construction Service

The collection costs for C&D waste in the District are difficult to estimate and consideration must be given to new residential construction and new non-residential construction. The estimated value for residential C&D waste is \$3,988,000 for 2002. This estimate is based on 5,697³ units of new residential construction and the placement of two 20' containers per building site at an average cost of \$350 per container. The estimated value for non-residential C&D waste is difficult to estimate as new non-residential construction is reported in square feet. The value likely exceeds \$10,000,000. Staff lacks adequate information to make a credible estimate and believes this estimate to be much lower than the market's actual value.

Estimated Value = > \$10,000,000

¹ Loudoun County Department of Economic Development. April 2002.

² Virginia Employment Commission. April 2002.

³ Loudoun County Department of Economic Development. September 2002 Economic Indicators through August and adjusted for the year.

CHAPTER 8.0

FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

8.2 Public Collection

8.2.1 Town Collection Contracts

All seven of the incorporated Towns in Loudoun County receive solid waste collection services through contractual agreements with solid waste collectors. The Town of Middleburg has the lowest collection cost for solid waste services at approximately \$12 per household, while residents in the Towns of Lovettsville and Hamilton receive solid waste collection services at a rate of approximately \$15 per household. The average rate for solid waste collection services in the incorporated Towns is approximately \$13.75 per household per month. Recyclables collection, yard waste collection and pick up of bulky items are generally included in these rates.

8.2.2 Town Departments of Public Works

Some of the Towns have Departments of Public Works that may collect yard waste and debris from public facilities due to storm damage and general facility maintenance. They transport this waste to the LCSWMF for processing.

8.2.3 Loudoun County School Board and County Public Works

The Loudoun County School Board collects waste from all public school buildings and all County offices and sites. The operational costs for this collection for FY03 are \$199,200 (personnel and equipment). The Public Works division contracts for collection and transport of recyclables from public buildings. Contract costs for FY03 were \$33,874.

8.2.4 County Special Collections

Loudoun County operates special waste collection programs through a variety of vendors and contractual agreements. A discussion of these programs is in Section 8.5.

8.2.5 Virginia Department of Transportation (VDOT)

VDOT collects roadside litter and debris throughout the District and transports this waste to the LCSWMF for disposal. Funding for this activity is included in VDOT's annual operating budget for Loudoun County. In FY02, this program expended \$75,994.

8.3 Private Facilities

There are five private solid waste management facilities providing services in Loudoun County. The current publicly quoted tipping fees for these facilities are provided in **Table 8-2**.

CHAPTER 8.0 FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

Table 8-2: Publicly Quoted Rates at Private Facilities in Loudoun County (September 2002)

Waste Type	Sterling WTS	Old Dominion WTS	CSI	Loudoun Composting	Hazel VWMF
Municipal Solid Waste	DNA	\$45-\$56/ton	DNA	DNA	DNA
Ditching Waste	DNA	\$45-\$56/ton	DNA	DNA	DNA
Construction Waste	\$44 / ton	\$45-\$52/ton	DNA	DNA	DNA
Rubble	\$44 / ton	\$45-\$52/ton	DNA	DNA	DNA
Yard Waste	DNA	\$45-\$56/ton	DNA	\$28/ton	DNA
Other Veg. Waste	DNA	DNA	DNA	DNA	DNA
Deer Carcasses	DNA	DNA	DNA	DNA	DNA
Tires	DNA	DNA	DNA	DNA	DNA
Appliances (refrig.)	DNA	DNA	DNA	DNA	DNA

DNA = Do Not Accept: The facility is not permitted to accept this waste or does not accept this waste from outside companies/generators.

8.4 Public Facilities

Loudoun County's public solid waste management facilities include the existing disposal unit (the "old landfill" site), the Woods Road disposal unit (WRSWMF), and recycling dropoff centers (DOCs). The two disposal units are adjacent facilities and comprise the LCSWMF.

8.4.1 Existing Disposal Unit ("Old Landfill" Site)

Loudoun County owns and operates a full service solid waste management disposal facility approximately 4 miles south of Leesburg. This facility includes a municipal solid waste (MSW) landfill, processing area for vegetative waste (VW), processing areas for special wastes, and a Recycling DOC. The County has constructed disposal capacity (Cell IIIA) that is sufficient to meet demand through 2006 based on current trends allowing for moderate growth. Future planned construction of capacity is discussed in Section 8.12 and operational costs are addressed in Section 8.5. Existing debt service for past site acquisition, permitting, construction, and closure is addressed in Section 8.4.1.1.

CHAPTER 8.0 FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

8.4.1.1 County Facility Existing Debt Service

Loudoun County has made a significant long-term financial investment in developing and maintaining adequate landfill disposal space to address solid waste management needs. These decisions have been supported by the recommendations of three separate citizens' committees appointed to consider the District's solid waste services. The funding of capital construction in the existing landfill to date has been through general obligation bonds with debt service on those bonds being covered by general tax revenues and, to some extent, offset by tipping fees. Current debt service accrues from four different bond issues. **Table 8-3** shows the year and amount issued in each sale:

Table 8-3: Bond Issues by Amount of Sale and Year Issued

AMOUNT OF SALE	YEAR ISSUED
\$3,765,000	1985
\$1,910,000	1987
\$830,000	1989
\$11,285,000	1993

The total original principle for the existing landfill site was \$17,790,000. The remaining principle outstanding as of FY2002 is \$8,525,000. **Table 8-4** details the debt service paid to date and the debt owed on the old landfill facility.

Table 8-4: Debt Retirement Schedule for Old Landfill Debt Issue

FY	Principal	Interest	FY	Principal	Interest
N/A	\$1,920,000	**	2003	\$988,000	\$444,755
1992	390,000	\$337,104	2004	986,000	392,080
1993	390,000	306,956	2005	983,000	338,624
1994	390,000	927,234	2006	985,000	284,285
1995	587,000	813,142	2007	982,000	229,127
1996	593,000	777,009	2008	977,000	173,288
1997	744,000	736,416	2009	703,000	125,648
1998	745,000	691,773	2010	706,000	86,460
1999	934,000	641,617	2011	434,000	54,890
2000	803,000	590,655	2012	246,000	36,190
2001	780,000	541,836	2013	260,000	22,275
2002	989,000	496,415	2014	275,000	7,563
PAID TO DATE	\$9,265,000	\$6,860,157	SUBTOTAL OWED FY03	\$8,525,000	\$2,195,185
			ISSUE TOTAL	\$17,790,000	\$9,055,342

CHAPTER 8.0 FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

8.4.1.2 Woods Road Solid Waste Management Facility

Site L, which became the Woods Road Solid Waste Management Facility, was acquired through a 1990 bond sale of \$13,545,000. Principle and interest payments began on that site beginning in FY92. The remaining principle outstanding from FY 2002 through FY 2011 is \$6,300,000. **Table 8-5** reflects the principle and interest payments on Woods Road SWMF debt through the debt retirement schedule.

Table 8-5: Debt Retirement Schedule for 1990 WRSWMF Bond Issue

FY	Principal	Interest	FY	Principal	Interest
1992	\$700,000	\$941,395	2003	\$700,000	\$427,000
1993	700,000	891,695	2004	700,000	377,300
1994	700,000	841,995	2005	700,000	327,600
1995	700,000	792,295	2006	700,000	277,900
1996	245,000	758,748	2007	700,000	227,850
1997	700,000	725,200	2008	700,000	177,450
1998	700,000	675,500	2009	700,000	126,875
1999	700,000	625,800	2010	700,000	76,125
2000	700,000	576,100	2011	700,000	25,375
2001	700,000	526,400	2012	0	0
2002	700,000	476,700	2013	0	0
PAID TO DATE	\$7,245,000	\$7,831,828	SUBTOTAL OWED FY03	\$6,300,000	\$2,043,475
			ISSUE TOTAL	\$13,545,000	\$9,875,303

8.4.1.3 County Facility Revenues

The LCSWMF generates revenues in the form of tipping fees, generally levied on tonnage and other charges, such as a surcharge for refrigerated appliances and tires. The revenues from tipping fees help offset some of the costs of operating the LCSWMF when they are posted to the General Fund.

For FY 03, the LCSWMF is expected to generate \$851,000 in actual fees and charges. This amount has been adjusted from the initial projection at a rate of 12% growth over FY02 and is in line with actual revenue patterns over the past 3 fiscal years. FY03 projected revenues will offset much of the expense of LCSWMF daily operations--personnel, contracted services, materials and small equipment. The paid fees also cover operating expenses for the solid waste that is accepted, processed and reused, recycled or disposed of under the Board of Supervisors fee waiver policy. For FY 03, fee waivers are estimated at \$999,925. This is a total of \$1,850,925 for actual and foregone revenues for the LCSWMF.

Table 8-6 summarizes collected and waived revenues at the LCSWMF for the past five fiscal years.

CHAPTER 8.0 FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

Table 8-6: Revenue History for the LCSWMF

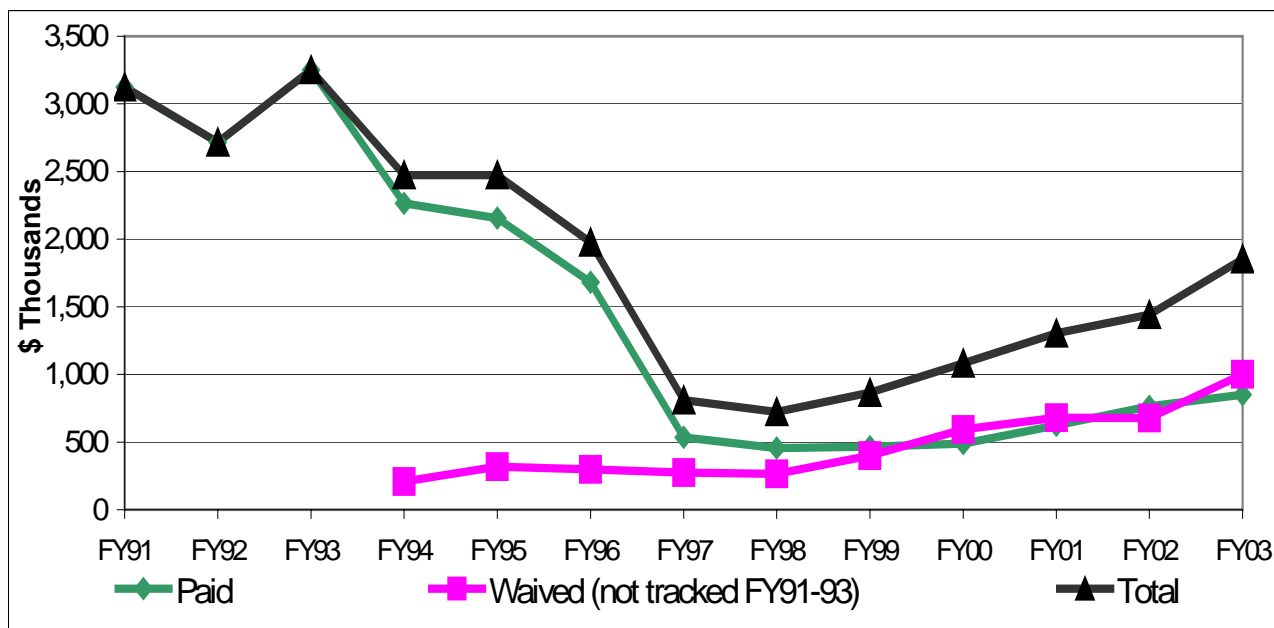
	FY 99*	FY 00	FY01	FY02	FY03**
Collected Fees (Actual Revenues)	\$466,547	\$487,993	\$623,509	\$763,074	\$851,000**
Waived Fees Value (Foregone Revenues)	\$400,365	\$593,702	\$681,298	\$678,456	\$999,925
Total Business (actual + foregone)	\$866,912	\$1,081,695	\$1,304,807	\$1,441,529	\$1,850,925

*FY 99 – FY 02 are actual revenues.

** Revised 9/1/02; FY03 Adopted figure was \$656,500.

The revenue picture for the LCSWMF has changed radically during the past ten fiscal years, and reflects changes in the County's solid waste policies and in local solid waste market conditions. **Figure 8-1** shows a ten-year trend for revenues. FY94 was the second year of a shift in County policy to support transfer of waste out of the District; in that year, revenues had fallen from approximately \$3.5 million the prior year. In FY96, a national solid waste services firm purchased a local business; after the acquisition, the local business was no longer the major customer at the LCSWMF that it had been previously and revenues fell to less than \$1 million dollars. From FY98 to the present, revenues have increased steadily as the LCSWMF has continued to serve individual residents, small businesses, small contractors, governments, and nonprofit organizations.

Figure 8-1: Total Business for the LCSWMF: Actual Fee Revenues + Waived Fee Values



CHAPTER 8.0 FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

8.4.1.4 Tipping Fees

Staff has conducted a survey of tipping fees charged at other MSW facilities. **Table 8-7** provides a comparison of LCSMWF fees with those charged in other public facilities. In Arlington County and in the City of Alexandria, the municipalities also provide solid waste services, including collection. Residents pay for these services through annual service fees per household, per bag or can, and/or per pickup. Residents must schedule certain kinds of pickup, while others are conducted regularly.

Table 8-7: Comparison of LCSWMF Fees to Other Jurisdictions

Locality	MSW	Vegetative	Construction	Dirt, Concrete Rubble	White Goods Surcharge
Loudoun Co.	\$55 per ton	\$55 per ton brush and yard waste	\$55 per ton	\$55 per ton	\$7 surcharge for refrigerant removal
Fairfax Co. Commercial Rates	\$45 per ton (discounts are available on a contract basis)	Brush - \$27 per ton Grass clippings- \$39.95 per ton	N/A	N/A	N/A
Fairfax Co. Residential Rates	\$3 for 1-5 32- gallon bags, \$5 for 6 - 10 32-gallon bags, \$45 per ton bulk items. Senior citizens discount, \$1 for 1-2 32 gallon bags	\$3 per mini- pickup load. \$5 per full-sized pickup w/o racks. \$27 per ton for large loads	N/A	N/A	\$1 per appliance
Fauquier Co.	\$38 per ton	\$38 per ton	\$25 per ton	\$25 per ton	Yes, amount unknown
Prince William Co.	Annual fee structure - Single Family home \$70, Townhouse \$64, Mobile home \$56		\$20 per 1/2 ton pickup truck load. Large amounts are not permitted	\$20 per 1/2 ton pickup truck load. Large amounts are not permitted	N/A
Montgomery Co. MD	Commercial, Recyclable material, Brush and Yard Trim 1 - 499 lbs. \$7.25, Over 500 lbs. \$29 per ton				No charge for refrigerant removal
Montgomery Co. MD	Residential - 499 lbs. = No Charge, 500 lbs. = \$11 per ton, Over 500 lbs. = \$44 per ton				No charge for refrigerant removal
Frederick Co. MD	Residential \$80 annual fee for up to 1.6 tons (equals \$40 per ton) or \$1 per 40 lbs. load (equals \$50 per ton). Commercial \$50 per ton. Vegetative wastes delivered to 4 collection points to be ground into mulch are accepted at no charge.				Accepted at the MSW rate. There is no charge for refrigerant removal

CHAPTER 8.0 FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

8.5 Loudoun County Programs

8.5.1 Current Funding Method for County Programs

OSWM conducts five major solid waste programs. Three are largely concerned with operations at the LCSWMF: Pit & Daily Operations, Closure/Post Closure, and Environmental Monitoring. The other two major program areas are Policy, Planning, & Compliance and Solid Waste Diversion & Recycling.

The General Fund is the primary location of all financial activity associated with the ordinary operations of County Government. Most taxes are accrued into this fund and transfers are made out of it as appropriate.⁴ Historically, the programs of OSWM have been financed by the General Fund. Such funding is subject to annual appropriation control by the Board of Supervisors. In fund accounting, any revenues generated from a General Fund program revert back to the General Fund; therefore, revenues from LCSWMF user fees indirectly offset most disposal operations costs when they are deposited in the General Fund.

Table 8-8 shows FY03 adopted budget information for the County's five major Solid Waste Management program areas.

8.5.2 Loudoun County Solid Waste Management Facility

For details on revenues and operations at the LCSWMF, please see Section 8.4 in this chapter.

8.5.3 Environmental Compliance Monitoring and Quality Assurance

Costs of sample collection and analysis and well repair and replacement will be paid for by the General Fund as annual operating expenses. In the event that remediation monitoring or corrective action are required for the existing landfill, costs will be paid by the General Fund. A methodology for corrective action has not been selected and, therefore, costs (capital and operational) cannot be determined at this time.

8.5.4 Policy, Planning and Compliance

8.5.4.1 Regulation and Enforcement

Costs are partially offset by fees collected for permit review and issuance of annual operating certificates. Enforcement and compliance activities for Chapters 1080 (Solid Waste Management Facilities), 1084 (Solid Waste Collection and Transportation), and 1086 (Waste Reduction and Recycling) of

⁴ Loudoun County. *FY 2003 Adopted Fiscal Plan*. p. 547.

CHAPTER 8.0 FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

the Codified Ordinances of Loudoun County are also funded through the General Fund.

Table 8-8: Solid Waste Management Program Costs – FY 03

Program Area	FY 03 Budget	Description
Pit and Daily Operations	\$ 1,320,970* (Central heavy equipment maintenance/ replacement is 45% of total)	LCSWMF Pit and Daily Operations includes personnel, contracted services for A&E services/ survey/ mapping, contract labor and data systems support, supplies for road and vegetation maintenance, uniforms, small equipment, shop and safety supplies, heavy equipment repair/ maintenance/ replacement and rental.
Closure / Post Closure	\$ 229,152 (split among 3 cost areas of personnel, contracts, materials/ equipment)	Closure and Post Closure care includes personnel, field engineering / surveying, gas system operations and maintenance, "raincoat" installation for interim closure, leachate system operations / maintenance and monitoring.
Environmental Monitoring	\$ 337,525 (Contracted services are 69% of total)	Environmental Monitoring includes personnel, equipment and consulting for routine and special sampling, monitoring, and compliance reporting and review for LCSWMF environmental management systems including air, gas, surface and ground water.
Policy, Planning and Compliance	\$ 617,784 (Personnel is 84% of total)	Policy, Planning and Compliance includes personnel for planning, policy, regulatory enforcement and compliance, program support; equipment and supplies for facility, vehicle and recycling compliance; also includes Countywide Medical Waste Collection contract.
Solid Waste Diversion and Recycling	\$ 859,496 (Contracted services are 63% of total)	Solid Waste Diversion includes Countywide Recycling DOC and HHW and other special waste contracts, DOC site and equipment repairs and maintenance and supplies & County-wide public information & education.

* Reflects Budget Reduction, September 2002. FY03 Adopted was \$1,495,970.

CHAPTER 8.0

FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

8.5.4.2 Solid Waste Management Plan Administration and Compliance

OSWM will be responsible for administrative duties related to the Solid Waste Management Plan (SWMP). They include, but are not limited to, major or minor amendments to the Plan, assurance that the Plan and Board policy agree, and evaluation of Plan implementation success. These duties will be part of the normal operations expenditures for this program and funded by the General Fund.

8.5.5 Solid Waste Diversion and Recycling

8.5.5.1 Recycling Dropoff Center Facilities

This service has both operational and capital costs. The operations costs are primarily contract costs for collection and processing of recyclables from DOCs and repair and maintenance of DOC facilities. Capital costs are incurred should new sites be added or existing sites be relocated or significantly enlarged. Other capital costs might include container purchase costs or improvements or repairs. Capital costs could be funded by the General Fund in the year expended or could be part of the CIP for major site improvements or acquisitions.

The special recycling center services at the LCSWMF are funded by a combination of General Fund support, user fees and revenues from recyclables. Waste oil, waste antifreeze and auto batteries collection, and recycling programs are supported by the General Fund and small amounts of revenue from the sale of the collected material. User fees support waste tire processing. Tipping fee revenues for tires offset the contract costs to arrange for removal and recycling of tires.

8.5.5.2 Curbside Residential Recycling

No capital or operating expenses are incurred by the County for curbside services; however, the County enforces Loudoun County Ordinances 1084 and 1086, which set the requirements for curbside recycling.

8.5.5.3 Commercial Recycling

No capital or operating expenses are incurred by the County other than providing for recycling services for County offices and the County school system. This program is funded through the County's General Fund. The County also enforces Loudoun County Ordinances 1084 and 1086, which set the requirements for curbside recycling. Additional DOCs are needed to facilitate recycling for small businesses.

CHAPTER 8.0

FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

8.5.5.4 Household Hazardous Waste Events

The County conducts HHW collection events for all residents of the District periodically throughout the year, and also provides collection for hazardous waste generators that qualify as Conditionally Exempt Small Quantity Generators (CESQG). The program is conducted as a contracted service with a contractor that provides personnel trained in collecting, handling, packaging, manifesting, transporting, and delivering the materials to properly certified disposal facilities. The program is paid for through the County's General Fund annual appropriations and is one of the largest dollar service programs in the solid waste management budget.

8.5.5.5 Education and Public Information

The County's General Fund provides an annual appropriation to education and public information. These funds cover a portion of the paid newspaper advertising for special collection events, printing for solid waste guides that are distributed through community resources, and staff time for preparing news releases and presentations on solid waste management and recycling.

Working in cooperation with civic and non-profit organizations and schools, the County allocates funding from the Virginia Litter Prevention and Recycling Grant program to provide educational resources about recycling and litter prevention to students in local schools.

8.5.5.6 Litter Grant Administration

The County administers the Virginia Litter Prevention and Recycling Grant program for the entire LCSWMPD. By participating as a cooperative group in this grant program, the Towns are eligible to receive greater annual funding amounts.

A portion of the County's share has typically been distributed to civic and non-profit organizations to assist litter removal from roadsides, rivers, and streams, and for public education. In addition, civic organizations can receive fee waivers at the LCSWMPF for waste collected through their volunteer-supported litter removal activities. The County also allocates litter grant funds to support specific educational and promotional programs for the community in order to encourage recycling and litter prevention.

8.5.6 Reduction and Reuse

Source reduction or "waste and pollution prevention" programs are at the top of the solid waste management hierarchy. Designed to reduce both the toxic constituents in products and the quantities of waste generated, reduction is also

CHAPTER 8.0

FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

the only method of waste management that only has costs associated with reduction and prevention information and education.

Adequate information is not available to estimate the annual value of source reduction programs in place or the potential for increasing and expanding such programs. Source reduction programs most likely to produce cost savings in the solid waste management system are those associated with new construction for reducing C&D waste and VW generation through “green” building design and construction standards that minimize certain types of waste. Another option for existing residential cost savings is a Pay-As-You-Throw (PAYT) system for solid waste collection where customers pay only for the amount of trash actually thrown away. This would have to be implemented through contracted services requirements for solid waste collection contracts.

Reuse has some costs associated with the communication, transportation, sorting and other handling involved with waste exchange for reuse purposes. There is no information available at this time as to the annual dollar amount of reuse that is occurring in areas such as used clothing or goods for distribution to others (Salvation Army, County surplus store, consignment stores or other waste exchanges such as construction materials).

8.6 Town Programs

8.6.1 Town Recycling Programs

The incorporated Towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill provide curbside recycling collection to their residents paid for by property taxes assessed by the Towns. Materials collected include plastic, metal, and glass containers, newspaper, and yard waste. These services are provided through contracts with private solid waste service providers. The Town of Leesburg also operates three recycling DOCs for its residents and has collaborated with the County in providing seasonal telephone book collection and for providing information to citizens about recycling and about special collection events.

8.6.2 Litter Grant

The incorporated Loudoun Towns are part of a cooperative agreement for receiving litter grant funds from the State of Virginia. Funded through a special tax on businesses that create products that are likely to contribute to littering, the funds are allocated to each Town on an annual basis. The County administers the grant funds through a process that includes an annual application, distribution, accounting, and reporting. The Towns use these funds to purchase recycling bins for their residents, to provide supplies for special cleanups and public education as well as for trash and recycling receptacles on town streets.

CHAPTER 8.0

FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

8.7 Current Programs of Non-Governmental Organizations or Agencies

The District's solid waste management system includes important components that are difficult to quantify in dollars, but may involve hundreds of individuals and thousands of volunteer hours each year. Several non-profit or non-governmental organizations conduct activities that contribute to the prevention, handling or recycling of solid waste. Several of these organizations conduct these activities with assistance from State litter grant funds and / or fee waivers from the County's Board of Supervisors.

Part II: Funding the Future Solid Waste Management System

8.8 Future Waste Reduction and Reuse Programs

There are no major initiatives planned by either the Town members or the County in this area.

8.9 Future Private Collection

Private collection services provided to HOAs or businesses or by individual contracts between collector and customer will remain private contractual transactions. There are no other initiatives for which assessment of funding requirements is required.

8.10 Future Public Collection

8.10.1 County Programs

The District is not currently planning for any expansion into the collection services sector. The collection efforts provided by the School Board will continue and be paid for out of current operating revenues from the General Fund. The capital equipment schedule and funding mechanism(s) for collection services that are provided by the private sector are not a responsibility of this plan.

8.10.2 Town Programs

The Towns of Hamilton, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill will continue to fund their solid waste and recycling collection services through the general fund. The Town of Hillsboro will continue to utilize a group contract to collect solid waste and recyclables and have customers directly billed.

CHAPTER 8.0 FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

8.11 Private Facility and Construction

8.11.1 Private Sector Waste Disposal

The privately owned and operated waste disposal facilities that serve Loudoun County are located outside the District and beyond the purview of this plan.

8.11.2 Private Sector Waste Processing and Waste Transfer Facility Schedule

The bulk of the waste processing and waste transfer facilities and programs in the District are owned and operated by the private sector; therefore, their funding mechanisms are not part of this Plan. The scheduling of facility expansions or any proposals for new facilities, however, are within the purview of this Plan.

8.12 Future Public Facilities

The District will maintain sufficient landfill capacity to be able to adequately respond to the District's total waste disposal demand but is relying on privately owned and operated facilities to moderate the demand, thus prolonging the life of the LCSWMF.

8.12.1 Future Landfill Capacity and Facility Construction Schedule

The existing LCSWMF infrastructure should meet most needs for the 20-year planning period of this plan. A replacement maintenance facility (shop) is needed within five years to assure adequate maintenance of equipment and compliance with all applicable regulations. Scale upgrades and other routine maintenance are provided for in the Capital Asset Replacement Fund program.

Phase III, as currently permitted, is planned to address the District's solid waste disposal needs for approximately 20 years, provided that the level of demand does not dramatically shift from the current level. Cell IIIA is constructed and in use. Future Cell IIIB construction is scheduled to be accomplished between 2005-2007. Design and construction monies for this cell would be required in FY05, and have been included in the proposed Capital Improvement Plan (CIP) for FY05-06. Sequence II Closure is planned to be a companion construction project to Cell IIIB.

The third cell (IIIC) would tentatively be required by FY2010-2013. At this time it appears that the third cell would meet the needs of the 20-year planning period. The funding for capital construction of the outyear cells and closure projects is tentatively scheduled as being supported by the General Fund. Sequence III closure is scheduled to follow Cell IIIC construction.

The schedule for the remaining projects is beyond the current CIP planning window and the actual dates will depend on conditions experienced between now

CHAPTER 8.0 FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

and construction of each project. Information provided includes the anticipated year in which costs will be incurred, the size of the project, and the cost based on 2001 dollars.

Table 8-9 lists the anticipated Capital budget projects for construction and engineering for both cell construction and closure.

Table 8-9: Anticipated LCSWMF Capital Projects

PROJECT	FY	SIZE (Acres)	Cost
Seq II Closure Design	FY05	--	\$65,500
Seq II Construction	FY06	6.6	\$2,101,000
Currently Funded			\$2,166,500
Cell IIIB Design	FY04	--	\$310,000
Cell IIIB Construction	FY05	10.3	\$2,495,000
Cell IIIC	FY13	9	\$3,450,000
Seq III	FY14	7	\$3,100,000
Seq IV	FY21	15.6	\$8,150,000
Unfunded Total	--	--	\$17,505,000

In addition to capital construction costs, the County may incur future costs for remediation of groundwater pollution originating from the old, unlined portion of the existing landfill. A review of corrective measures to remediate pollutants emitted from the existing landfill is underway. The County could incur additional costs to implement corrective action should that be the direction of the Virginia Department of Environmental Quality (DEQ). Funding for a modest level of corrective action has been earmarked in the County's revolving loan fund. Repayment of these loans would be through the County's General Fund. Funding for waste disposal operations, post-closure care, and environmental monitoring at the current landfill is addressed in Section 8.14 in this chapter.

8.12.2 The Woods Road Solid Waste Management Facility (WRSWMF)

The schedule for the construction of the first or subsequent phases of the WRSWMF is subject to the demand for disposal capacity in the District. At such

CHAPTER 8.0

FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

time as the demand warrants, the District will develop a construction schedule and a funding strategy.

8.12.3 Future Recycling DOC Site Facilities

The schedule for constructing a regional DOC near Purcellville to serve Western Loudoun—as well as any other DOCs—is subject to approval by the Board of Supervisors and budget constraints. The source of funding future DOC sites will be the General Fund.

8.12.4 Future Construction Waste Processing

There are no initiatives for publicly funded construction waste processing identified in this plan. The private sector facilities providing these services are not in contractual agreements with the district and therefore the funding for these facilities is not part of this plan.

8.12.5 Future Vegetative Waste Processing

There are no initiatives for publicly funded vegetative waste processing identified in this plan. The private sector facility providing this service is not in a contractual agreement with the District and therefore the funding for this facility is not part of this plan. As demand warrants, the County may seek a contract with this facility to accept a minor amount of putrescable yard waste for composting. This waste is likely to be brought to the County SWMF as newly enacted recycling requirements are implemented.

8.13 Future Public Sector Recycling and Diversion Programs

Future recycling collection is funded by the same mechanism that supports solid waste collection programs. Future County recycling programs are addressed in Section 8.14 of this Plan.

The Plan recommends that the County solicit proposals for a public/private partnership to locate a private partner to construct and operate a recycling collection center at the County SWMF. This location is already available and owned by the County and is centrally located. No additional cash outlays are anticipated of the County. Both the County and the Towns should benefit by lower contract costs since the recyclables collected in both jurisdictions must currently be transported to Fairfax County for processing.

8.14 Future County Programs

The Board of Supervisors will rely on the General Fund for the Recycling and diversion programs including HHW and clean waste collection, servicing

CHAPTER 8.0

FUNDING THE SOLID WASTE MANAGEMENT SYSTEM

recycling dropoff centers and special recycling services at the County SWMF. No capital facilities are proposed for these programs.

8.15 Future Town Programs

Funding for future Town collection programs has been addressed. Funding for special programs will be by general fund appropriation.

CHAPTER 9.0 PUBLIC PARTICIPATION

9.0 PUBLIC PARTICIPATION

9.1 Introduction

Public participation is a key part of the solid waste management planning process. State regulations (9 VAC 20-130-130) require an open process of deliberation, comment and review. Public participation also ensures that the ideas and concerns of the varying constituent groups, ranging from the regulated solid waste service providers to the individual jurisdictions to individual residents, will be served by the plan.

9.2 The Ad Hoc Solid Waste Management Planning Committee

The formal planning process began with the creation of an Ad Hoc Solid Waste Management Planning Committee by the Board of Supervisors. On July 1, 2002, Loudoun County Board of Supervisors Chairman Scott K. York (At-Large) appointed Supervisor Sally R. Kurtz (Catocin) to chair the Committee, with Supervisor Eleanore Towe (Blue Ridge District) and Supervisor Jim Burton (former Mercer District) to represent the Board on the Committee. The process for plan review and development is described in two Board items dated June 10, 2002 and July 1, 2002. These documents are included in **Appendix B**. Supervisor Kurtz invited representatives from the seven incorporated Towns in the County to attend and participate in Committee meetings as voting members. Each Town designated one or more representatives. Comprised of elected officials and professional staff, the Committee members were:

Sally R. Kurtz, Supervisor, Catocin District
& Chair, Ad Hoc Solid Waste Management Committee
Mr. Jim Burton, Supervisor, Former Mercer District
Ms. Eleanor Towe, Supervisor, Blue Ridge District
The Honorable Keith Reasoner, Mayor of Hamilton
The Honorable Steve Morgart, Mayor of Hillsboro
The Honorable Elaine Walker, Mayor of Lovettsville
Mr. Charles Hartgrove, Town Administrator of Middleburg
Mr. Kelly Yost, Town Administrator of Round Hill
Mr. Martin Kloeden, Assistant to the Town Manager of Purcellville
Mr. Tom Mason, Director of Engineering and Public Works,
Town of Leesburg

9.2.1 Preparation and Planning

In preparation for the first meeting of the Ad Hoc SWMP Committee on September 11, 2002, Chairman Kurtz distributed packets of background information to all members of the Board of Supervisors and to the Town representatives that included:

CHAPTER 9.0 PUBLIC PARTICIPATION

- Solid Waste Ordinances (Chapters 1080, 1084, and 1086 of the Codified Ordinances of Loudoun County);
- Summary reports on the activities and recommendations from previous County citizens' committees on solid waste;
- State regulations and requirements governing solid waste management planning; and
- the District's 1995 Solid Waste Management Plan.

Chairman Kurtz also sent letters of invitation and announcement of the planning process to approximately 150 organizations and individuals. The invitations went to:

- Permitted solid waste collectors,
- Solid waste management facility operators,
- Largest Homeowners' Associations (HOAs) and residential managers,
- Leaders of Loudoun environmental groups, and
- Respondents to the solid waste survey of businesses that had indicated an interest in the planning process.

The Chairman encouraged these parties to attend meetings of the Ad Hoc SWMP Committee and advised them that more formal public input sessions would be conducted later.

9.2.2 Meetings of the Ad Hoc SWMP Committee

The Committee met a total of eight times: September 11, September 25, October 9, October 23, and November 20 in 2002 and January 8, January 22 and February 12 in 2003. All meetings were announced with advance notice on the public calendar and were open for public participation. Copies of the Committee's meeting packets and copies of presentation materials were provided at the meeting and were available upon request. Members of the public who were in attendance often addressed the Committee to ask questions, provide information, or make comment.

At each meeting, an agenda was provided, the meeting summary from the previous meeting was reviewed and approved, any straw votes taken at the previous meeting were reviewed, and staff presented response to any requests for information or directions for action from the Committee. The agendas and agenda items for the meetings are presented in **Appendix C** and the meeting summaries are presented in **Appendix D**.

9.2.3 Formal Comment by Interested Parties

Several parties, including a property manager and a Town mayor, made comment in the form of letters to the Chair. Members of the solid waste management industry also responded to Chairman Kurtz by presenting formal comment to the Committee via letters. Each letter that was addressed to

CHAPTER 9.0 PUBLIC PARTICIPATION

Chairman Kurtz and/or to the Committee received a written response and copies were provided at the next meeting.

On September 11, September 25, and October 9, 2002, a letter from three different solid waste management firms was presented to the Committee. The firms each addressed:

- A lack of recycling infrastructure in the County;
- Their company's interest in expanding their businesses into recycling operations; and a
- Request to lower the tipping fees at the LCSWMF to foster competition, especially for independent solid waste collectors who do not have a facility in the County.

On October 9, the Committee discussed the idea of a public-private partnership to site, construct, and operate a recycling transfer station at the Loudoun County Landfill. On October 23, staff presented potential terms of the partnership, primarily focused on operations and goals of the facility. The Committee directed staff to expand upon this report. A set of recommended parameters and methods for initiating and completing such a project were staff presented by staff on November 20, 2002.

Also, on October 9, the Committee discussed a particular company's request to lower the tipping fees at the LCSWMF, ensuring a "level playing field" and requested that staff return at the next meeting with additional information. The Committee provided guidance that two objectives should be considered in reviewing the tipping fees – conservation of landfill capacity and a more revenue neutral operation. On October 23, staff presented a preliminary study from its solid waste consultant describing four scenarios. Each scenario described a goal of capturing increased increments of the waste stream based on pricing structure and provided estimates of revenue that would be generated and the projected amount of landfill capacity that would be consumed under each scenario.

9.2.4 Issues and Options

On September 25, October 9, and October 23, 2002, the Committee considered a series of issues and options for presented in three categories of the solid waste management system:

- Recycling,
- Solid Waste Management System Deficits, and
- Emergent trends.

Each category featured five to seven issues or questions about the current solid waste management system. The Committee was given a set of options for each issue from which to choose. The options ranged from maintaining a particular part of the system or no change in policy or operations, to various degrees of

CHAPTER 9.0

PUBLIC PARTICIPATION

policy change, operational changes, expenditures, or ordinance amendment. The Committee members discussed the options or drafted new ones and cast straw votes on the policy options. The results of these straw votes were then converted into policy statements. At subsequent meetings, the Committee reviewed and approved the policy statements. Finally, the Committee members voted to confirm the policy statements which form the basis for Chapters 5, 6 and 7 of the Solid Waste Management Plan.

9.2.5 Public Input Session: Small Group Networking Process

The Committee held a public input session on January 8, 2003. McCaffery Associates conducted this session using the small group networking process. The purpose of the meeting was to allow key citizens, government and industry representatives to learn of the Plan's key elements, to react to the Committee's proposals, and to propose additions, deletions or changes to the Plan before it was finalized. After staff conducted presentations on collection, disposal, recycling, environmental protection, and policy, planning and public information, each topic was followed by a small group discussion of the Committee's recommendations for activities or policies on each respective topic. Each small group included a facilitator, a technical advisor and a recorder to clarify and capture the highlights of the attendees' discussions on each topic.

On January 22, 2003, staff provided a detailed and summary overview and response, of the January 8, 2003. The Committee considered the comments from each topical area of the discussion and whether to change their recommendation or finding in the Draft SWMP. At its February 12, 2003 meeting, the Committee considered the complete Draft SWMP for referral to the County and the Towns.

9.2.6 Referral from the Committee

The Committee completed its discussion and review on February 12, 2003, and forwarded it to the Board of Supervisors and Town Councils with a recommendation for approval.

Table 9-1 summarizes the dates, purposes, and draft plan items distributed for each meeting.

CHAPTER 9.0 PUBLIC PARTICIPATION

Table 9-1: Ad Hoc Solid Waste Management Planning Committee Meetings

Date	Meeting Purpose	Draft Plan Items
Sept 11, 2002	Staff presentation on the District's solid waste management system	Chapters 1 – 4
Sept 25, 2002	Staff presentation on financing the solid waste management system and on recycling issues; Committee votes	Draft Chapter 7 (later renumbered to Chapter 8)
Oct 9, 2002	Staff presentation of solid waste management system deficits; Committee votes	None
Oct 23, 2002	Staff presentation of emergent trends issues; Committee votes	None
Nov 20, 2002	Review of and decision on remaining issues	Final review of draft Chapters 1 – 4 and 7; draft Chapters 5, 6, and 8 (later re-numbered to Chapter 9)
Jan 8, 2003	Public Input Session: Small Group Networking Process	None
Jan 22, 2003	Consideration of public input	Draft Chapter 5
Feb 12, 2003	Draft SWMP document review and approval	Draft SWMP document

9.3 Solid Waste Management Planning District Public Hearing

The Virginia Solid Waste Management Act (§10.1-1411) and the Solid Waste Management Planning Regulations (§9VAC 20-130-130) require a public hearing before a Solid Waste Management Plan can be adopted by a planning district. At the recommendation of the Ad Hoc Committee, the Board of Supervisors agreed to conduct the Public Hearing process on behalf of the District. Ad Hoc Committee Chairman Kurtz presented an overview of the draft plan to the Loudoun County Board of Supervisors at the Board's regular business meeting on March 17, 2003. The Board then referred the matter to a Public Hearing.

The required public hearing was conducted on April 8, 2003 by the Loudoun County Board of Supervisors acting on behalf of the entire Loudoun County Solid Waste Management Planning District including the seven incorporated Towns. The public hearing was advertised for two consecutive weeks (March 19 and 26, 2003) prior to the Public Hearing in the *Loudoun Times Mirror*. A copy of the Public Hearing notice is included in date sequence in **Appendix B**.

CHAPTER 9.0 PUBLIC PARTICIPATION

As part of the Public Hearing, Committee Chairman Kurtz made a formal presentation of the regulatory requirements, plan goals and objectives, baseline descriptive information, and key findings and recommendations. A copy of the overheads used in the presentation is included in **Appendix B**. After the presentation, the public was afforded an opportunity to address the Board/District Members on the proposed plan.

Six members of the Public addressed the Board/District on the plan at the Public Hearing and one set of written comments was received during the public comment period. The contents of the comments is detailed in the Board Item dated April 21, 2003 which is included in **Appendix B**. The referenced Board Item includes a transcript of the Public Hearing. Each of the public comments has been addressed in the Board Item. In summary, four respondents spoke in favor of the proposed reduction in County landfill tipping fees, and several others spoke in favor of the proposed Private Public Partnership to improve recycling infrastructure.

9.4 County of Loudoun

Following public comment, the Board closed the Public Hearing and began discussion of the proposed plan for the unincorporated areas of the County. Board members and representatives of member Towns asked questions of Committee members and County staff. Several Board members requested additional information on recommendations in the plan. The Board forwarded the adoption of the plan to the April 21, 2003 business meeting for further discussion and possible action.

Additional discussion by the Board occurred on April 21, 2003. Discussion focused on the Plan recommendation to reduce tipping fees at the County Landfill. The Board requested multiple historical documents on the subjects of design capacity, projected landfill life, and closure costs. The Solid Waste Management Plan was forwarded to the May 5, 2003 business meeting for final action. The requested documents were provided to the Board members on April 25, 2003. A copy of the transmittal memo and list of documents is included in **Appendix B**.

On May 5, 2003, the Board adopted a Resolution of Approval adopting the Loudoun County Solid Waste Management Plan as proposed by the Ad Hoc Committee. The Board further authorized and directed County staff to submit the plan on behalf of the County and District to the Virginia Department of Environmental Quality upon adoption by all member Towns. The adopted plan was forwarded to the other members of the Loudoun County Solid Waste Management Planning District for their approval by individual Town resolutions.

CHAPTER 9.0 PUBLIC PARTICIPATION

9.5 Town of Middleburg

The proposed Loudoun County Solid Waste Management Plan was presented to the Middleburg Town Council during a regular business meeting on May 8, 2003. Following discussion, the Town Council unanimously passed a resolution adopting the proposed Plan as submitted on May 8, 2003. A copy of the resolution is included in **Chapter 1** of the Plan.

9.6 Town of Hamilton

The proposed Loudoun County Solid Waste Management Plan was presented to the Hamilton Town Council during a regular business meeting on May 12, 2003. Following discussion, the Town Council unanimously passed a resolution adopting the proposed Plan as submitted on May 12, 2003. A copy of the resolution is included in **Chapter 1** of the Plan.

9.7 Town of Purcellville

The proposed Loudoun County Solid Waste Management Plan was presented to the Purcellville Public Works Committee who recommended that the Plan be sent to Town Council to review and approve the Plan during a regular business meeting on May 13, 2003. Following discussion, the Town Council unanimously passed a resolution adopting the proposed Plan as submitted on May 13, 2003. A copy of the resolution is included in **Chapter 1** of the Plan.

9.8 Town of Round Hill

The proposed Loudoun County Solid Waste Management Plan was presented to the Round Hill Town Council during a regular business meeting on May 15, 2003. Following discussion, the Town Council unanimously passed a resolution adopting the proposed Plan as submitted on May 15, 2003. A copy of the resolution is included in **Chapter 1** of the Plan.

9.9 Town of Lovettsville

The proposed Loudoun County Solid Waste Management Plan was presented to the Lovettsville Town Council during a regular business meeting on May 29, 2003. Following discussion, the Town Council unanimously passed a resolution adopting the proposed Plan as submitted on June 15, 2003. A copy of the resolution is included in **Chapter 1** of the Plan.

CHAPTER 9.0 PUBLIC PARTICIPATION

9.10 Town of Hillsboro

The proposed Loudoun County Solid Waste Management Plan was presented to the Hillsboro Town Council during a regular business meeting on June 17, 2003. Following discussion, the Town Council unanimously passed a resolution adopting the proposed Plan as submitted on June 17, 2003. A copy of the resolution is included in **Chapter 1** of the Plan.

9.11 Town of Leesburg

The proposed Loudoun County Solid Waste Management Plan was presented to the Leesburg Environmental Advisory Commission on June 18, 2003. The Commission forwarded it to the Town Council with a recommendation of adoption. The staff report to the Town Council is dated August 5, 2003 and included in Appendix B. The proposed Plan was presented to the Leesburg Town Council during a public work session on August 11, 2003. Following discussion, the Town Council unanimously passed a resolution adopting the proposed Plan as submitted during a regular business meeting on September 9, 2003. A copy of the resolution is included in **Chapter 1** of the Plan.

APPENDICES

The following appendices have been included to provide additional information and to serve as a reference to the Loudoun County Solid Waste Management Plan.

	# of Pages	Page Citation
A Laws and Regulations Cited.....	1	1-1
B Board of Supervisors and Town Council Items	115	1-2
C SWMP Committee Agendas and Agenda Items.....	151	1-2
D SWMP Committee Meeting Summaries	52	1-2
E Chapter 1084, Solid Waste Collection and Transportation	34	2-11
F Chapter 1086, Solid Waste Reduction and Recycling	19	2-11
G Major & Minor Solid Waste Collectors, 2003	2	3-1
H Chapter 1082, Solid Waste Storage	4	3-2
I Private SWMFs in Loudoun County	2	3-4
J Chapter 1080, Solid Waste Management Facilities.....	37	3-7
K Board of Supervisors Landfill Policy	2	3-9
L Inventory of Disposal Sites	1	3-14
M Board of Supervisors Recycling Policy	2	3-15
N Recycling Dropoff Centers	2	3-16
O Commonwealth of Virginia Locality Recycling Rate Report.....	4	3-22

APPENDIX A LAWS AND REGULATIONS CITED

The following regulations have been cited to provide additional information and to serve as a reference to the Loudoun County Solid Waste Management Plan.

Code of Federal Regulations,
Hazardous Materials Regulations..... Title 49 CFR PARTS 100-185

Code of Federal Regulations,
Protection of Stratospheric Ozone..... Title 40 CFR PART 82, Subpart F

Virginia Regulations for
Solid Waste Management Planning 9 VAC 20-130-10 et seq.

Virginia Waste Management ActSection 10.1-1400 et seq.

Virginia Solid Waste Management Regulations..... 9 VAC 20-80-10 et seq.

Virginia Hazardous Waste Management Regulations 9 VAC 20-60-12 et seq.

Virginia Regulation Governing the Transportation
of Hazardous Materials..... 9 VAC 20-110-10 et seq.

The Codified Ordinances of Loudoun County, Part 10; Title Eight

Chapter 1080. Loudoun County Solid Waste Management Facilities Ordinance

Chapter 1082. Loudoun County Solid Waste Storage Ordinance

Chapter 1084. Loudoun County Solid Waste Collection and Transportation
Ordinance

Chapter 1086. Loudoun County Solid Waste Reduction and Recycling Ordinance

APPENDIX B BOARD OF SUPERVISORS AND TOWN ITEMS

All items and discussions regarding this plan that went to the Board of Supervisors, Town Councils and Public Hearing, have been placed in this appendix as part of the public record. Documents are in sequential order and copied double sided. All items begin on the right side page and some facing pages will be blank intentionally.

Document	# of Pages
1. Board of Supervisors Land Use Committee Item 2: Process to Revise the Solid Waste Management Plan, June 10, 2002.....	5
2. Board of Supervisors Meeting Item 7A: Land Use Committee Report – Process to Revise the Solid Waste Management Plan, July 1, 2002	2
3. Copy Teste of July 1, 2002 Board action on Plan Revision Process	2
4. Board of Supervisors Information Item #2: Solid Waste Management Plan LCSWMPD, March 17, 2003	1
5. Notice of Public Hearing on proposed LCSWMP run in Loudoun Times-Mirror on 3/19/03 and 3/26/03.....	5
6. Ad Hoc Solid Waste Management Plan Committee Presentation dated April 8, 2003.....	23
7. Board of Supervisors LCSWMP District Public Hearing Item #2: LCSWMPD Revised Solid Waste Management Plan, April 8, 2003	16
8. Board of Supervisors Action Item #8: LCSWMPD Revised Solid Waste Management Plan, April 21, 2003	28
9. Richard Weber, April 25, 2003, memo to the Board of Supervisors: Historical Documents Relating to Landfill Capacity Projections, Projected Landfill Life, and Cost of Closing the facility (lists of documents only)	3
10. Board of Supervisors Action Item #5: Adoption of the LCSWMPD Revised Solid Waste Management Plan, May 5, 2003.....	11
11. Board of Supervisors Meeting Transcript: Adoption of LCSWMPD Revised Solid Waste Management Plan, May 5, 2003	1
12. Copy Teste of May 5, 2003 Board action to adopt the LCSWMP	1

APPENDIX B
BOARD OF SUPERVISORS AND TOWN ITEMS

- 13. Staff Report to Purcellville Town Council. Adoption of the LCSWMPD
Revised Solid Waste Management Plan, May 6, 2003.....6
- 14. Staff Report to Leesburg Town Council. Adoption of the LCSWMPD
Revised Solid Waste Management Plan, August 5, 2003.9

**Board of Supervisors
Land Use Committee
Information Item**

**Subject: Loudoun County Solid Waste Management Planning District
Process to Revise the Solid Waste Management Plan**

Election District: Countywide

Background:

Title 10.1-1411 of the Code of Virginia gives local governments the responsibility and authority for local solid waste management planning. The Virginia Solid Waste Management Planning Regulations (9VAC 20-130-1) were amended effective August 1, 2001, to revise requirements for such plans and establish July 1, 2004, as the compliance date for adoption and submission of updated solid waste management plans (SWMPs). Loudoun's current plan was adopted on December 20, 1995, and was the product of a Solid Waste Planning Citizens Committee that met in 1994 through 1995. The Committee conducted extensive review of solid waste issues in the County and made substantial modifications to the 1992 plan. Since 1995, Loudoun's solid waste management needs and systems have shifted due to population growth and the nature of the solid waste industry.

The regulations require localities to develop and implement SWMPs that address all aspects of solid waste management and consider the handling of all types of non-hazardous solid waste generated within the locality. Plans must demonstrate how a 25% recycling rate will be achieved and maintained, and must include an implementation schedule that addresses needs for a 20 year time frame. The SWMP is an element of the County Comprehensive Plan and serves as the service plan for delivering solid waste management services to a rapidly growing community. In addition to planning for reduction, reuse, recycling, and disposal of traditional municipal solid waste materials, there are emergent waste issues associated with a rapidly growing technological society. For example, electronics wastes require special handling and readily available solutions may not be available.

The Code and regulations require that plans must be developed and adopted through a public process that includes public meetings or citizens committee, and a Board of Supervisors Public Hearing. Localities may form solid waste management planning districts, and Loudoun's current district includes the Towns of Lovettsville, Hillsboro, Middleburg, Round Hill, Purcellville, Hamilton, and the County. This item brings the plan requirement to the Board's attention, and requests guidance for developing a process and schedule.

PLANNING PROCESS ISSUES:

Placing the SWMP Process on the Board's Priority Projects List

While the Board focuses on multiple large projects during the remainder of its current term, the July 1, 2004 due date for final submission of SWMPs is six months into the term of the next Board. A new Board would experience great difficulty in assuming this task during its first six months in office. Staff therefore recommends that the Board commit to the development and approval of the SWMP in cooperation with participating towns in the LCSWMPD for submission to DEQ by December 31, 2003. The process and time required for approval by the individual Towns is not clear at this time. DEQ staff are currently reviewing this issue including the possible need for a separate public process in each of the towns.

Public Process

The SWMP review process requires public participation through both a Board public hearing and an additional public input process. The public input process requirement can be met by one or any combination of several options:

- ◆ public meetings conducted by a Board Committee;
- ◆ public meetings conducted by a Committee of the Whole; and, or,
- ◆ public meetings conducted by a Citizen Advisory Group.

Previous Boards have used all of these processes at one time or another. The current Board has used the focus group process extensively with the development of the Comprehensive Plan. The issues in the development and modification of the plan are largely public policy and are ultimately Board decisions. Staff requests guidance on which direction the Board wishes to take in designing and implementing a public process.

Schedule

Staff anticipates that information briefings and discussion of technical plan content will begin immediately after the Board's summer break. Staff will be gathering information on waste generation and recycling activities over the summer and will draft portions of the plan addressing waste generation, population and waste projections, waste disposal capacity options, and service gaps. It is expected that 1-2 dedicated meetings per month will be required from September-December 2002 to review the plan material, to discuss various technical components of the plan, and to develop tentative policy direction. Staff could then draft a review document in January for a Board public hearing in March 2003. Following the public hearing and resolution of issues raised, the plan would go to the participating Towns for adoption prior to July 1, 2003. The goal would be to have all Towns adopt the plan in time for the Board to give final approval before the summer recess in 2003. The target dates are based on a process conducted at the Board/Board

Committee level. If the Board elects to use an outside group such as a citizen's committee, the time line is likely to be extended significantly.

Significance of the SWMP on Permitting of Facilities in the County

Perhaps one of the most significant issues to emerge with the new regulations is the impact of the planning process and the resultant document on the permitting of solid waste management facilities in the County. The planning horizon is 20 years. Localities are to address the anticipated types and amount of waste generation in that period and the proposed facilities that will handle that anticipated waste; identify the capacity of those facilities; and develop an implementation schedule that ensures that the facilities are in place when needed. Any changes to the plan with regard to unanticipated increases in capacity, or the addition of a new (unanticipated) facility will require the locality to engage in a major plan amendment process. The major plan amendment process requires a public participation element and approval of the plan amendment by DEQ prior to permitting a new facility or the expanded capacity of an existing facility.

SWMP CONTENT ISSUES:

Staff has identified a number of content issues that will surface in the review and development of the plan. Attachment 1 lists those issues identified to date and provides a short discussion of each.

FISCAL IMPACT:

The fiscal impact of this project has been anticipated. Conduct of this work is included in the OSWM work plan for FY02-03. The OSWM operating budget has \$27,400 earmarked for FY2003 for temporary employees and or consultant assistance as needed and for printing/publication. It would be difficult for staff to estimate accurately the actual costs for support to this project until the Board outlines a process to follow. As a general rule, the larger the work group and the greater the separation from the decision-makers, the more effort, thus the greater cost of the project.

Attachments: Attachment 1. Content Issues for the Loudoun SWMP Review
Staff Contact: Richard S. Weber, Director, OSWM

**LAND USE COMMITTEE ITEM #2, ATTACHMENT 1.
SOLID WASTE MANAGEMENT PLAN (SWMP) CONTENT ISSUES**

The following is a brief discussion of content issues that have been identified for discussion in the SWMP review process.

Sustaining a 25% Recycling Rate

The statutes and the regulations require the locality to demonstrate how a 25% (or higher if desired by the Board) recycling rate will be achieved and maintained. The County has submitted the 2001 recycling report to the Department of Environmental Quality which reports a 28% recycling rate for the County. Less than half (13%) of the recycling rate is attributable to municipal solid waste. The remaining recycled material is yard waste, arboreal debris, and construction waste. There have been discussions at the Federal level and in the Virginia legislature regarding raising the mandatory 25% rate, but no action has been taken at this time.

Clarifying the Method of Calculating the 25% Recycling Rate

The Board has indicated that it wishes to accomplish the required recycling rate based on municipal solid waste generated. The regulations allow the County to include certain amounts of vegetative waste that are recycled, and construction waste that is recycled. Excluding these wastes from the calculation will lower the rate achieved. Including these wastes makes the rate artificially high. Staff requests clarification and reaffirmation that the Board does not want to include vegetative waste (including yard waste and arboreal waste) recycled in assessing this requirement. Staff also requests clarification on including construction demolition and debris waste tonnage in this calculation. Since staff cannot verify how much CDD is generated in the County, it is difficult to know how much is recycled.

Long-Term Countywide Recycling

If recycling commodities markets continue to remain depressed, and the recycling mandates remain in effect, the Board may eventually have to consider a countywide approach to curbside recycling in order to sustain the current requirement of 25%. The Environmental Protection Agency has already set a new target of 35% recycling and efforts were initiated in this past two legislative sessions to increase the State rate. While this effort has been tabled for now, it is likely to re-appear in the near future. While the cost of a Countywide recycling program would be substantial, the benefits would include a standardized program for the whole County making education and outreach more cost effective and more cost efficient.

Consideration of all Non-Hazardous Waste Generated

The regulations require localities to consider the generation of all non-hazardous waste and how it will be managed in the locality. The regulations do not require the locality to actually perform the handling, but there has to be a mechanism to manage this waste. This issue is of particular importance to a growing jurisdiction like Loudoun. Each day presents new challenges in identifying acceptable vendors of waste management services for County residents and businesses. Special wastes such as sludge, tires, batteries, waste oil, waste antifreeze, asbestos, and fuel contaminated soils are common special wastes about which staff receive inquiries. Regulated medical waste is also an issue that has received significant attention in the last several years.

Trash Collection Service Gaps

Trash collection in the rural, less densely populated areas is largely conducted by small haulers that operate one or two small (often pickup trucks) trucks. These haulers are, for the most part, an aging work force. Staff is concerned that service gaps will develop as these operators cease doing business in the near future. These routes are not currently profitable for the larger haulers.

Waste Dirt and Rubble

As a result of the intense level of construction activity in the County, the generation of waste dirt, rock, concrete, and pavement is increasing rapidly. The SWMP should address the generation of this material and the County's desired means of managing these materials.

Emergent Waste Handling for High-Tech Community

An affluent society generates considerable amounts of consumer wastes, many of which may release potentially hazardous wastes. Obsolete computers, televisions, cell phones, and other electrical devices, mercury switches, Ni-Cad batteries, and fluorescent bulbs are all examples of materials that have special waste handling requirements and that will pose challenges in the future.

Date of Meeting: July 1, 2002

#7A_

**BOARD OF SUPERVISORS
ACTION ITEM**

SUBJECT: Land Use Committee Report: Process to Revise the Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District (LCSWMPD)

ELECTION DISTRICT: County Wide

CRITICAL ACTION DATE: At the pleasure of the Board

RECOMMENDATIONS:

Staff: Staff recommends that the Board commit to the development and approval of the SWMP in cooperation with participating towns in the LCSWMPD for submission to DEQ by December 31, 2003.

Committee: The Land Use Committee recommends that the Board affirm its intent to complete the review and revision of the Solid Waste Management Plan during the remainder of its term; that the timeline follow the staff suggestion to the extent possible; and that the process of review should be conducted by an ad hoc Committee of the Board, the composition of which is to be recommended by Chairman York to the full Board. (3-0)

COMMITTEE DISCUSSION:

The Land Use Committee discussed this item at their regular business meeting on June 10, 2002. While the Committee expressed concern regarding the Board's schedule for the remainder of the term, they determined that the sitting Board was in a better position to address the required review and revision of the Solid Waste Management Plan than the next Board would be, given a deadline by State statute of July 1, 2004. The Committee felt that all of the current standing committees had insufficient room on their upcoming calendars and that a Committee of the Whole was less desirable than an ad hoc committee. The Committee discussed the tentative work schedule suggested by staff and recommended that the ad hoc committee follow that schedule to the extent possible. The schedule anticipates that the first meeting of the ad hoc committee will occur in September following the Board's summer recess.

SCHEDULE:

Staff anticipates that information briefings and discussion of technical plan content will begin immediately after the Board's summer break. Staff will be gathering information on waste generation and recycling activities over the summer and will draft portions of the plan addressing waste generation, population and waste projections, waste disposal capacity options, and service gaps. It is expected that 1-2 dedicated meetings per month will be required from September-December 2002 to review the plan material, to discuss various technical components of the plan, and to develop tentative policy direction. Staff could then draft a review document in January for a Board public hearing in March 2003. Following the public hearing and resolution of issues raised, the plan would go to the participating Towns for adoption prior to July 1, 2003. The goal would be to have all Towns adopt the plan in time for the Board to give final approval before the summer recess in 2003. The target dates are based on a process conducted at the Board/Board Committee level. If the Board elects to use an outside group such as a citizen's committee, the time line is likely to be extended significantly.

FISCAL IMPACT:

The fiscal impact of this project has been anticipated. Conduct of this work is included in the OSWM work plan for FY02-03. The OSWM operating budget has \$27,400 earmarked for FY2003 for temporary employees and or consultant assistance as needed and for printing/publication. It would be difficult for staff to estimate accurately the actual costs for support to this project until the Board outlines a process to follow. As a general rule, the larger the work group and the greater the separation from the decision-makers, the more effort, thus the greater cost of the project.

DRAFT MOTION (S):

I move approval of the Land Use Committee recommendation that the Board commit to completion of the review and revision of the Solid Waste Management Plan in the current term. I further move that an ad hoc committee of the Board, the composition of which to be recommended by Chairman York, be appointed to conduct the process to review and revise the Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District; and that the Committee report back to the full Board with recommended changes by January 2003.

STAFF CONTACT(S): Richard S. Weber, Director, OSWM

0206-080



Loudoun County, Virginia

www.co.loudoun.va.us

County Administration

1 Harrison Street, S.E., 5th Floor, P.O. Box 7000, Leesburg, VA 20177-7000
Telephone (703) 777-0200 • Fax (703) 777-0325

At a meeting of the Board of Supervisors of Loudoun County, Virginia, held in the County Administration Building, Board of Supervisors' Meeting Room, 1 Harrison St., S.E., Leesburg, Virginia, on Monday, July 1, 2002 at 9:00 a.m.

PRESENT: Scott K. York, Chairman
Eleanore C. Towe, Vice Chairman
William Bogard
James G. Burton
Eugene A. Delgaudio
Chuck Harris
Mark Herring
J. Drew Hiatt
Sally Kurtz

IN RE: LAND USE COMMITTEE REPORT: PROCESS TO REVISE THE SOLID
WASTE MANAGEMENT PLAN FOR THE LOUDOUN COUNTY SOLID
WASTE MANAGEMENT PLANNING DISTRICT (LCSWMPD)

Mr. Herring moved that the Board of Supervisors approve the Land Use Committee recommendation that the Board commit to completion of the review and revision of the Solid Waste Management Plan in the current term. He further moved that an ad hoc committee of the Board, the composition of which to be recommended by Chairman York, be appointed to conduct the process to review and revise the Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District; and that the Committee report back to the full Board with recommended changes by January 2003; and amended to make the ad hoc committee a four member committee.

Seconded by Mrs. Towe.

Voting on the Motion: Supervisors Bogard, Burton, Harris, Herring, Kurtz, Towe, and York – Yes; Supervisors Hiatt and Delgaudio – No. This motion passed.

Mr. Hiatt moved to amend the motion that a Citizens' Committee comprised of nine citizens with up to two representatives from industry be appointed to conduct the process to review and revise the Solid Waste Management Plan allowing County Solid Waste Management Planning District and the Committee to report back to the Board with recommended changes by January 2003.

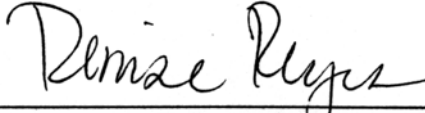
Seconded by Mr. Delgaudio.

LAND USE COMMITTEE REPORT: PROCESS TO REVISE
THE SOLID WASTE MANAGEMENT PLAN FOR THE LOUDOUN
COUNTY SOLID WASTE MANAGEMENT PLANNING DISTRICT
(LCSWMPD)

Page 2

Voting on the Motion: Supervisors Delgaudio and Hiatt – Yes; Supervisors Bogard, Burton, Harris, Herring, Kurtz, Towe, and York – No. This motion failed.

A COPY TESTE:

A handwritten signature in cursive script, appearing to read "Denise Rye".

DEPUTY CLERK FOR THE LOUDOUN
COUNTY BOARD OF SUPERVISORS

DCR:july 1, 2002 resolution-f

**BOARD OF SUPERVISORS
INFORMATION ITEM**

**SUBJECT: Solid Waste Management Plan
Loudoun County Solid Waste Management Planning District**

BACKGROUND:

The Virginia Solid Waste Management Planning regulations, 9 VAC 20-130-10 *et seq.*, require the Loudoun County Solid Waste Management Planning District (LCSWMPD) to submit a revised solid waste management plan to the Virginia Department of Environmental Quality by July 2004. To address this requirement, the Board of Supervisors appointed an Ad Hoc Solid Waste Management Planning Committee (the Committee) in July of 2002. The Committee's charge from the Board of Supervisors was to conduct a review of the Solid Waste Management Plan (SWMP) and develop a revised Plan for consideration and final approval by local governing bodies by July 2003.

This plan has to address the solid waste management needs of the entire Loudoun County Solid Waste Management Planning District (LCSWMPD) for a period of 20 years. The LCSWMPD includes the Towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill, as well as the unincorporated portions of the County. The Committee is made up of Supervisors Kurtz, who chaired the Committee, Burton and Towe, and each Town designated an official representative to the Committee.

The Committee met eight times between September 2002 and February 2003. All meetings were open to the public. On January 8, 2003 a public input session was held.

During the meetings, the Committee discussed solid waste management issues and options and guided the revision of the plan. The Committee formed a series of findings and recommendations which became part of the draft plan. The draft SWMP will be presented to the Board of Supervisors at 1:30 on March 17 and is being advertised for an April 8 Public Hearing. An executive summary by Chairman Kurtz is included on page iii of the draft LCSWMP.

ATTACHMENT: Draft Loudoun County Solid Waste Management Plan

STAFF CONTACT: Richard S. Weber, Director, OSWM

PUBLIC HEARING

The LOUDOUN COUNTY BOARD OF SUPERVISORS will hold a public hearing on behalf of the Loudoun County Solid Waste Management Planning District in the Board of Supervisors Meeting Room, County Government Center, 1 Harrison Street, S.E., Leesburg, VA, 20177 on **TUESDAY, APRIL 8, 2003, at 6:30 p.m.**, to consider the following:

REVIEW AND AMENDMENT OF THE SOLID WASTE MANAGEMENT PLAN LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING DISTRICT

Pursuant to Section 10.1-1411 of the Code of Virginia, and Section 9 VAC 20-130-130 of the Virginia Administrative Code, the Loudoun County Solid Waste Management Planning District hereby gives notice of its intent to consider adoption of amendments to the Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District. The District is comprised of the unincorporated areas of the County, and the incorporated Towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill. **The Board of Supervisors will conduct the hearing as part of a regularly scheduled Public Hearing.**

The District's current Solid Waste Management Plan was adopted in 1995. Virginia Solid Waste Management Planning Regulations require all local governing bodies to revise and adopt Solid Waste Management Plans by July 1, 2004. The Regulations require the preparation of a comprehensive plan that addresses how the District will manage all non-hazardous solid waste generated in the District for the next 20 years.

On July 1, 2002, the Board of Supervisors established an Ad Hoc Solid Waste Management Planning Committee to review and revise or replace the existing plan in accordance with State regulations and with current and projected solid waste generation data. The seven member Towns of the District joined in this effort by appointing a representative to the Ad Hoc Committee. On February 12, 2003, the Ad Hoc Solid Waste Management Planning Committee approved and recommended the revised Solid Waste Management Plan to the Board of Supervisors, and to the Councils of the member Towns for their consideration and adoption.

On behalf of the District, the Board of Supervisors will receive public comment on this revised solid waste planning document at the scheduled public hearing. The Board and Councils of the member Towns must act by May 30, 2004 to approve, or amend and approve, the revised plan, and forward it to the Virginia Department of Environmental Quality for final approval.

The purpose of the plan is to describe a solid waste management strategy and its implementation to ensure the provision of adequate and dependable solid waste management services, to protect the health and safety of residents, to ensure protection of the environment, and identify funding for the solid waste management system. The Committee considered current solid waste information and issues in developing the proposed strategy. Key provisions of the revised plan will:

- Continue reliance on the private sector to provide solid waste collection services.
- Continue reliance on the private sector to provide the majority of municipal solid waste management and disposal through a transfer station and out-of County landfills.
- Continue County ownership and operation of a multifaceted solid waste facility ensuring that all residents and businesses in the District have options for disposal of solid waste.
- Achieve revenue neutrality through a revised landfill pricing structure that would require less local tax funding for solid waste management facility operations and capital construction, would foster competition among independent collectors, and would continue to manage the capacity as an asset with long-term value to the District.

- Continue reliance on the private sector to provide for management and disposal of construction and demolition wastes through transfer stations and out-of-County landfills.
- Increase the availability of waste oil, waste antifreeze, and other special waste collection services by the County.
- Increase the number and distribution of household hazardous waste collection events by the County.
- Improve the District's recycling infrastructure by pursuing a public/private partnership to construct and operate a recycling depot at the County Solid Waste Management Facility to enhance recycling and to provide incentives to collectors through a low-cost or no-cost recycling transfer facility.
- Continue the existing recycling dropoff center program and expanding the program by restoring service in the Purcellville area.
- Ensure the protection of the environment by increasing the regulatory oversight for management of waste dirt, and the burning of solid waste.
- Maintain compliance with all environmental protection standards and requirements at the County Solid Waste Management Facility.

Full and complete copies of the proposed Loudoun County Solid Waste Management Plan are available and may be examined in the Loudoun County Office of Solid Waste Management, 906 Trailview Blvd., SE, Leesburg Virginia, from 8:30 a.m. to 5:00 p.m., Monday through Friday. For further information contact the Office of Solid Waste Management at 703-777-0187. Copies of the proposed revised plans are also available at the Rust, Purcellville, Lovettsville, Middleburg, Sterling and Eastern Loudoun Regional Libraries and on the County's website at www.loudoun.gov, co.loudoun.va.us

All members of the public will be heard as to their views pertinent to these matters.

Hearing assistance is available for meetings in the Board of Supervisors' Meeting Room. FM Assistive Listening System is available at the meetings at all other locations. If you require any type of reasonable accommodation, as a result of a physical, sensory or mental disability, to participate in this meeting, contact County Administration at 703-777-0200. Please provide three days notice.

BY ORDER OF:


Scott K. York, Chairman, Loudoun County Board Of Supervisors
The Honorable C. L. Dimos, Mayor, Town of Middleburg
The Honorable William T. Druhan, Jr., Mayor, Town of Purcellville
The Honorable Mayor Francis P. Etro Jr., Town of Round Hill
The Honorable Steve Morgart, Mayor, Town of Hillsboro
The Honorable Keith Reasoner, Mayor, Town of Hamilton
The Honorable Kristen Umstadd, Mayor, Town of Leesburg
The Honorable Elaine Walker, Mayor, Town of Lovettsville

**AFFIDAVIT OF PUBLISHER
PURSUANT TO SECTION 8.01-415
OF THE 1950 CODE OF VIRGINIA
AS AMENDED**

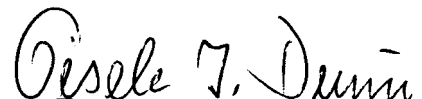
Hugo J. Lembert, being duly sworn deposes and says that the attached order of publication was published in The Loudoun Times Mirror, a newspaper published in the County of Loudoun, State of Virginia, on

3/19/03, 3/26/03, _____.

and that deponent is a duly authorized agent of the Publisher of said newspaper.


Classified Manager

Subscribed and sworn to me this 27th day of March, 2003.


County of Loudoun

(SEAL)

My Commission Expires March 31, 2006

My commission expires:_____.

Notary Public in and for the Commonwealth of Virginia.

PUBLIC HEARING

The **LOUDOUN COUNTY BOARD OF SUPERVISORS** will hold a public hearing on behalf of the Loudoun County Solid Waste Management Planning District in the Board of Supervisors Meeting Room, County Government Center, 1 Harrison Street, S.E., Leesburg, VA, 20177 on **TUESDAY, APRIL 8, 2003, at 6:30 p.m.**, to consider the following:

REVIEW AND AMENDMENT OF THE SOLID WASTE MANAGEMENT PLAN LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING DISTRICT

Pursuant to Section 10.1-1411 of the Code of Virginia, and Section 9 VAC 20-130-130 of the Virginia Administrative Code, the Loudoun County Solid Waste Management Planning District hereby gives notice of its intent to consider adoption of amendments to the Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District. The District is comprised of the unincorporated areas of the County, and the incorporated Towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill. **The Board of Supervisors will conduct the hearing as part of a regularly scheduled Public Hearing.**

The District's current Solid Waste Management Plan was adopted in 1995. Virginia Solid Waste Management Planning Regulations require all local governing bodies to revise and adopt Solid Waste Management Plans by July 1, 2004. The Regulations require the preparation of a comprehensive plan that addresses how the District will manage all non-hazardous solid waste generated in the District for the next 20 years.

On July 1, 2002, the Board of Supervisors established an Ad Hoc Solid Waste Management Planning Committee to review and revise or replace the existing plan in accordance with State regulations and with current and projected solid waste generation data. The seven member Towns of the District joined in this effort by appointing a representative to the Ad Hoc Committee. On February 12, 2003, the Ad Hoc Solid Waste Management Planning Committee approved and recommended the revised Solid Waste Management Plan to the Board of Supervisors, and to the Councils of the member Towns for their consideration and adoption.

On behalf of the District, the Board of Supervisors will receive public comment on this revised solid waste planning document at the scheduled public hearing. The Board and Councils of the member Towns must act by May 30, 2004 to approve, or amend and approve, the revised plan, and forward it to the Virginia Department of Environmental Quality for final approval.

The purpose of the plan is to describe a solid waste management strategy and its implementation to ensure the provision of adequate and dependable solid waste management services, to protect the health and safety of residents, to ensure protection of the environment, and identify funding for the solid waste management system. The Committee considered current solid waste information and issues in developing the proposed strategy. Key provisions of the revised plan will :

- Continue reliance on the private sector to provide solid waste collection services
- Continue reliance on the private sector to provide the majority of municipal solid waste management and disposal through a transfer station and out-of County landfills
- Continue County ownership and operation of a multifaceted solid waste facility ensuring that all residents and businesses in the District have options for disposal of solid waste
- Achieve revenue neutrality through a revised landfill pricing structure that would require less local tax funding for solid waste management facility operations and capital construction, would foster competition among independent collectors, and would continue to manage the capacity as an asset with long-term value to the District.
- Continue reliance on the private sector to provide for management and disposal of construction and demolition wastes through transfer stations and out-of-County landfills
- Increase the availability of waste oil, waste antifreeze, and other special waste collection services by the County
- Increase the number and distribution of household hazardous waste collection events by the County
- Improve the District's recycling infrastructure by pursuing a public/private partnership to construct and operate a recycling depot at the County Solid Waste Management Facility to enhance recycling and to provide incentives to collectors through a low-cost or no-cost recycling transfer facility.
- Continue of the existing recycling dropoff center program and expanding the program by restoring service in the Purcellville area
- Ensure the protection of the environment by increasing the regulatory oversight for management of waste dirt, and the burning of solid waste

Full and complete copies of the proposed Loudoun County Solid Waste Management Plan are available and may be examined in the Loudoun County Office of Solid Waste Management, 906 Trailview Blvd., SE, Leesburg Virginia, from 8:30 a.m. to 5:00 p.m., Monday through Friday. For further information contact the Office of Solid Waste Management at 703-777-0187. Copies of the proposed revised plans are also available at the Rust, Purcellville, Lovettsville, Middleburg, Sterling and Eastern Loudoun Regional Libraries and on the County's website at www.loudoun.gov

All members of the public will be heard as to their views pertinent to these matters.

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BY ORDER OF:

Scott K. York, Chairman, Loudoun County Board Of Supervisors
The Honorable C. L. Dimos, Mayor, Town of Middleburg
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The Honorable Mayor Francis P. Etro Jr., Town of Round Hill
The Honorable Steve Morgart, Mayor, Town of Hillsboro
The Honorable Keith Reasoner, Mayor, Town of Hamilton
The Honorable Kristen Umstattd, Mayor, Town of Leesburg
The Honorable Elaine Walker, Mayor, Town of Lovettsville

Loudoun County Solid Waste Management Plan



Ad Hoc Solid Waste Management Plan Committee
Sally Kurtz, Chair
April 8, 2003

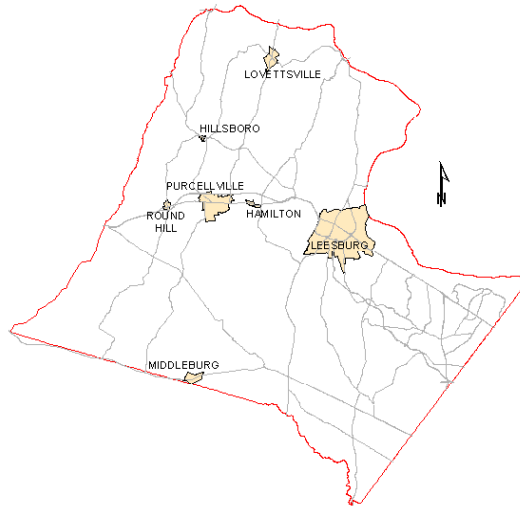
1

Loudoun County Solid Waste Management Plan Regulatory Requirements

- Virginia Solid Waste Management planning regulations (9 VAC 20-130-10) require every jurisdiction to review and revise Solid Waste Management Plan by July 1, 2004.
- Jurisdictions may form planning districts.
- The unincorporated areas of Loudoun County and the 7 incorporated Towns have formed the Loudoun Solid Waste Management Planning District.

2

Loudoun County Solid Waste Management Plan Solid Waste Management Planning District



- **County of Loudoun**
- **Town of Hamilton**
- **Town of Hillsboro**
- **Town of Leesburg**
- **Town of Lovettsville**
- **Town of Middleburg**
- **Town of Purcellville**
- **Town of Round Hill**

3

Loudoun County Solid Waste Management Plan Committee Members

Sally R. Kurtz, Supervisor
Catoclin District &
Chair, Ad Hoc SWM Committee

Mr. Jim Burton, Supervisor,
Former Mercer District

Ms. Eleanor Towe, Supervisor,
Blue Ridge District

The Honorable Keith Reasoner,
Mayor of Hamilton

The Honorable Steve Morgart,
Mayor of Hillsboro

The Honorable Elaine Walker,
Mayor of Lovettsville

Mr. Charles Hartgrove,
Town Administrator of Middleburg

Mr. Kelly Yost,
Town Administrator of Round Hill

Mr. Martin Kloeden, Assistant to the
Town Manager of Purcellville

Mr. Tom Mason, Director of
Engineering and Public Works,
Town of Leesburg

4

Mandatory Plan Content

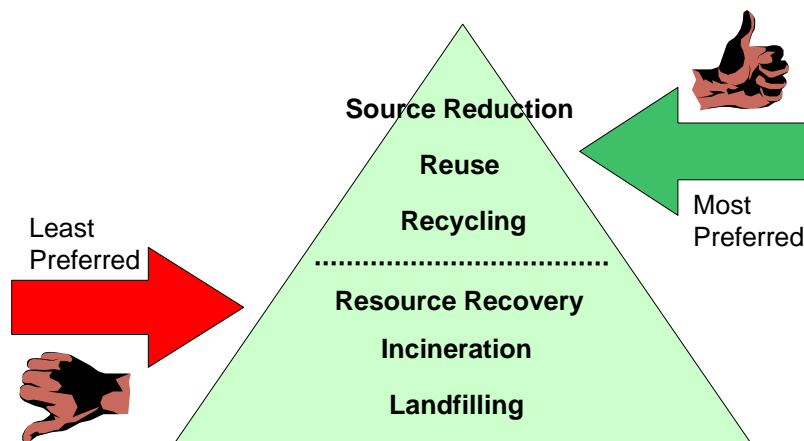
Virginia regulations require localities to develop and implement SWMPs that:

- address all aspects of solid waste management
- demonstrate compliance with the solid waste hierarchy
- consider the handling of all types of non-hazardous solid waste generated within the locality
- demonstrate how a 25% recycling rate will be achieved and maintained, and
- include an implementation schedule that addresses needs for a 20 year time frame.

5

Solid Waste Management Hierarchy

(9 VAC 20-130-30)



6

Loudoun County Solid Waste Management Plan

Stakeholders

- Solid Waste Facility Owners / Operators
- Solid Waste Collectors (Large and Small)
- Residents
- Businesses
- County Government
- Towns
- Homeowners' Associations
- Waste / Service Contractors
- Lawn Care Companies
- Special Waste Generators
- Hospitals
- Metals Plating Operations
- Automotive Repair
- Building Contractors
- Other

7

Loudoun County Solid Waste Management Plan

Plan Development Process

- 8 public meetings
- Committee received solid waste management background
- Discussion of issues & options
- Development of key findings & recommendations
- Public feedback on Committee recommendations

8

Trash 101

Committee received solid waste management background

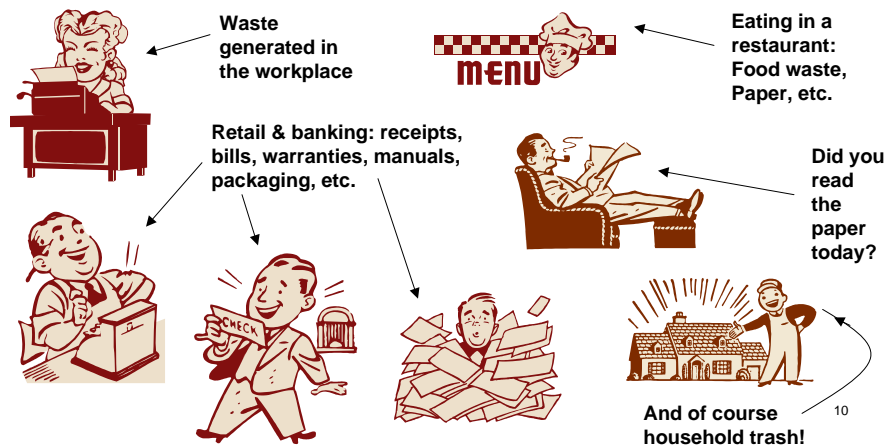
- Population Growth
- Waste Types
- Waste Generation Rate
- Waste Generation Amount

9

MSW Generation Rate

Who Makes It? Loudoun generates an average of 5.5 pounds of MSW per person per day.

This includes food, recyclables, & more...



Waste Generation Amounts

How much do we make? Many factors influence solid waste generation including population, number of households and employment, as used for these waste generation estimates.

	2005	2025
Municipal Solid Waste Generation	239	424
Construction Waste Generation	122	216
VEG/Yard Waste Generation	28	50
Total	389	689

(in thousands of tons)

11

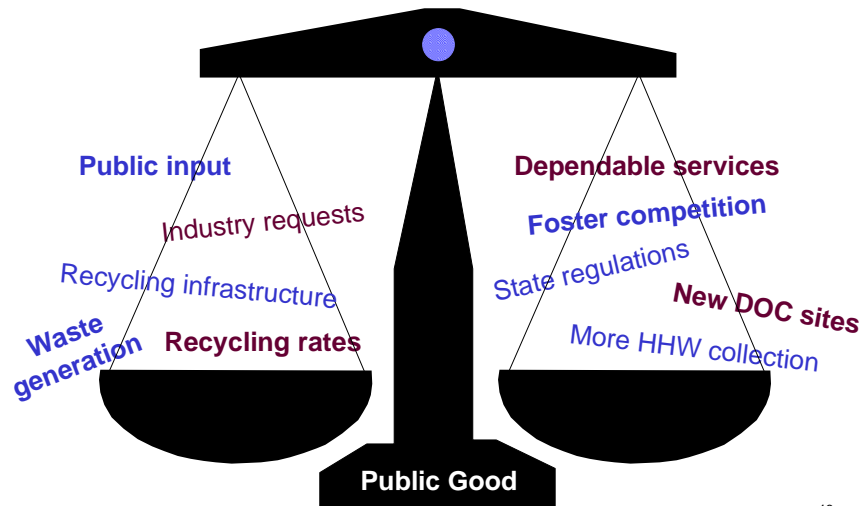
MSW Generation

239,000 tons of MSW is enough to fill the Government Center 7 times.



12

Issues and Options



13

Public Feedback

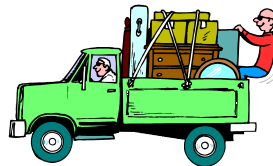


Committee asked for public feedback on recommendations using small group networking process

14

Who Collects the Trash

- In Loudoun County, private companies collect all residential & nonresidential trash.
- There are 9 permitted major collectors.
- There are 16 permitted minor collectors.



15

Who Pays for Collection

- HOA dues
- Town taxes
- Landlord leases
- Individual subscriptions
- Individual transport to Landfill

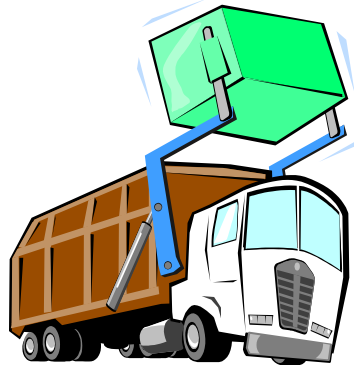


Estimated **\$35M** market

16

Loudoun County Solid Waste Management Plan

Collection Recommendation



**Continue reliance
on private sector
waste collection**

17

Loudoun County Solid Waste Management Plan

All Solid Waste Disposal System Flow

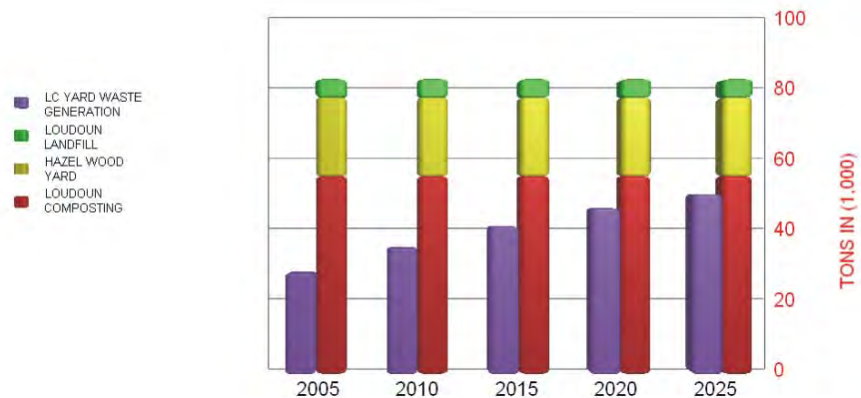
Where does it go?



18

Loudoun County Solid Waste Management Plan

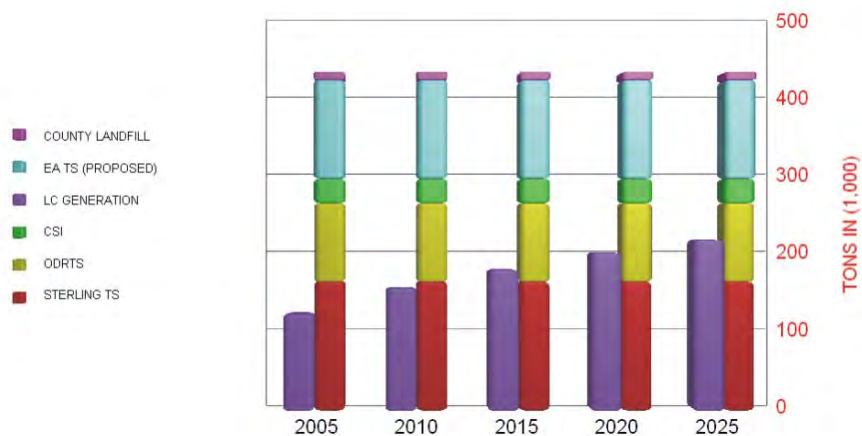
Vegetative Waste System Capacity



19

Loudoun County Solid Waste Management Plan

C&D Waste System Capacity

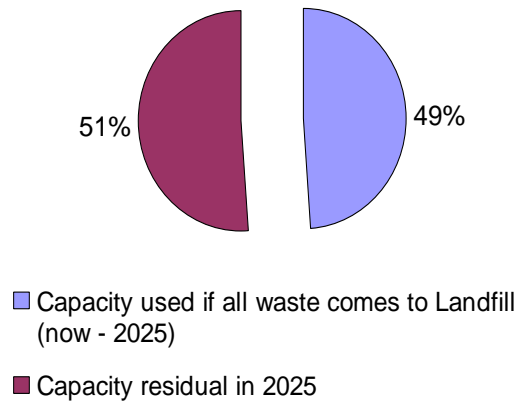


20

Loudoun County Solid Waste Management Plan

County Landfill Permitted Capacity

Permitted Capacity 24M Cubic Yards

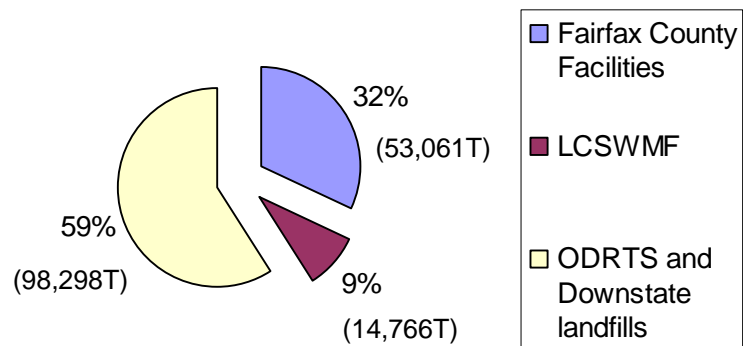


21

Loudoun County Solid Waste Management Plan

MSW Disposal Destination

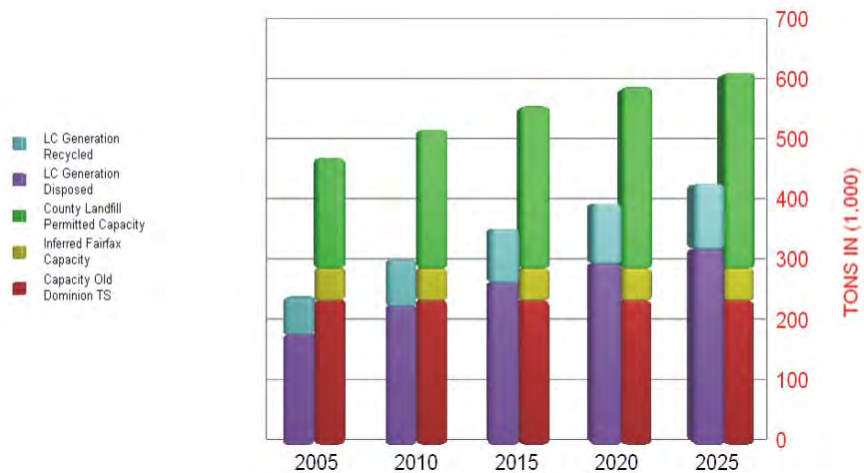
Disposal of MSW in CY2002



22

Loudoun County Solid Waste Management Plan

MSW System Capacity



23

Loudoun County Solid Waste Management Plan

Role of LCSWMF

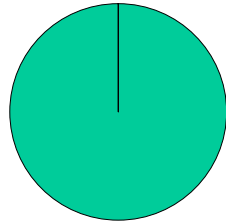
- Provides a disposal option to those who do not have collector services
- Manages disposal of difficult-to-process wastes not desired at other facilities
- Ensures that the District does not depend on sole source providers of disposal services
- Acts as backup to other service providers to ensure uninterrupted services
- Provides staging area for management of solid wastes in disasters

24

Loudoun County Solid Waste Management Plan

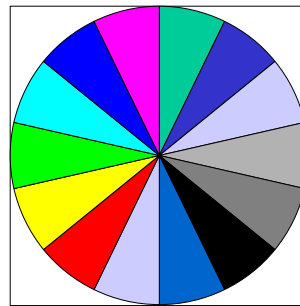
Disposal

TRANSFER STATIONS



■ Paying Customers
■ High Efficiency

COUNTY LANDFILL



■ Individuals
■ Non-Profit Waivers
■ Small contractors
■ County, School Waste
■ Animal waste
■ Deer carcasses
■ Storm Debris
■ Sludge
■ Tires
■ Appliances
■ Lawn Mowers
■ Powdery waste
■ Indiv. Veg Waste
■ DIY remodelling

25

Loudoun County Solid Waste Management Plan

LCSWMF Services

Scrap Metal Area



Phase IIIA



Working Face



Scalehouse



26

Loudoun County Solid Waste Management Plan

Capital Funding for LCSWMF

Current Debt Service (paid off in 2014)	\$19 million (P&I)
Seq. II Closure (construction in 2005)	\$2.2 million
Cell IIIB (2006)	\$2.8 million
Cell IIIC (2013)	\$2.4 million
Seq. III Closure (2014)	\$3.1 million
Seq. IV Closure (2021)	\$8.2 million

(Based on current demand levels)

27

Loudoun County Solid Waste Management Plan

Cumulative LCSWMF Impact on General Fund

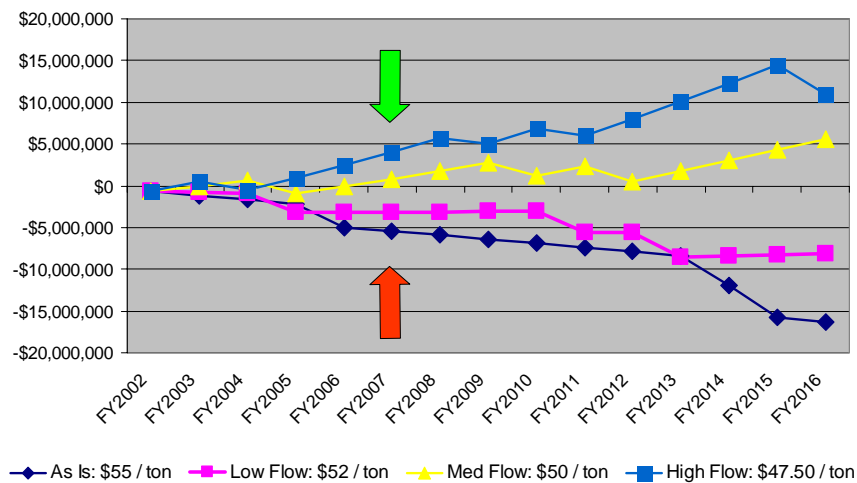


Chart information provided by Solid Waste Services, LLC

28

Impacts on Permitted Capacity

Minimum or no impact:

- 90 - 115 years of capacity at current tipping fee

Maximum impact:

- 65 - 80 years of capacity at \$47.50 tipping fee

Current permitted capacity is 24,000,000 cubic yards

29

Summary of LCSWMF Tipping Fees

- Reduction in local tax funding
- Some leveling of collection playing field
- Covers some or all capital construction costs
- Landfill continues as minor industry player
- Conserves future Landfill disposal capacity

30

Loudoun County Solid Waste Management Plan

Recycling Requirement

All jurisdictions in Virginia are required to maintain a recycling rate of 25%.

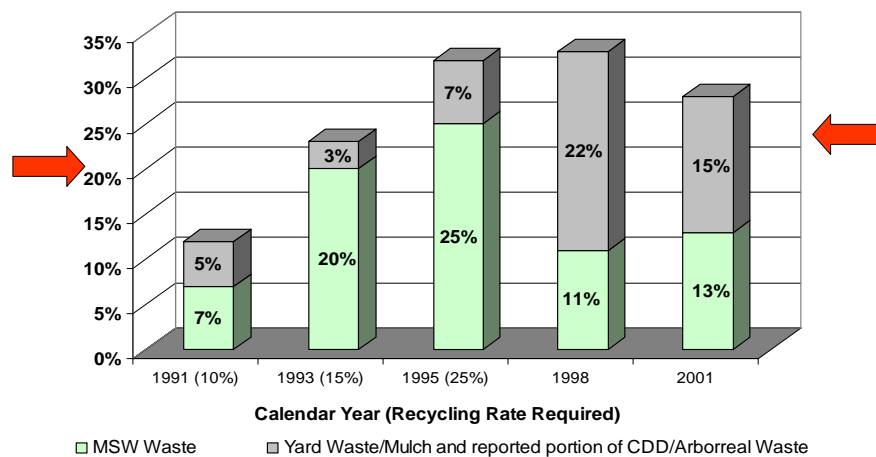


31

Loudoun County Solid Waste Management Plan

Recycling History

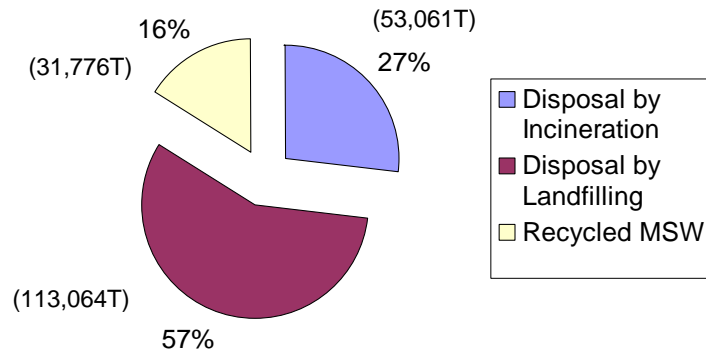
Rates reported by Loudoun County to VA DEQ:



32

Loudoun County Solid Waste Management Plan

Preliminary Recycling Rate (2002)



16% MSW Recycling + 5% Credit for Stump Mulch = 21%

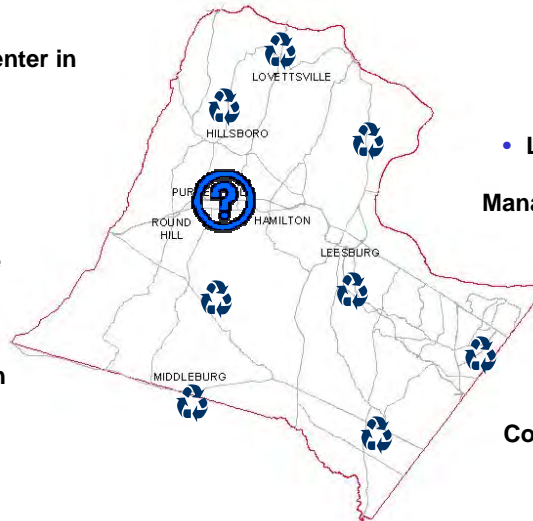
21% ≠ 25%

33

Loudoun County Solid Waste Management Plan

Central Western Loudoun Recycling DOC

- The George Center in Lovettsville
- Hillsboro Elementary
- Philomont Fire Station
- Mickey Gordon Memorial Park



- Lucketts Elementary
- Loudoun County Solid Waste Management Facility
- Park View High School
- Arcola Community Center

In addition, the Town of Leesburg operates 3 DOCs and all 7 of the Towns include curbside recycling in their collection contracts.

34



Loudoun County Solid Waste Management Plan

Public-Private Partnership



For Recycling Infrastructure



- Construction would be completed within 12 months of the time of award.
- Tipping fees would be assessed on an equitable basis.
- The facility design could incorporate a permanent HHW collection area.
- The private partner would agree to operate with a maximum amount of bypass or residual waste (based on weight) of 5% for all materials. The residual waste would be a daily average, calculated weekly.
- The County envisions a partnership term of ten years or more. At the end of the term, the partnership could be extended, transferred, or terminated.

35



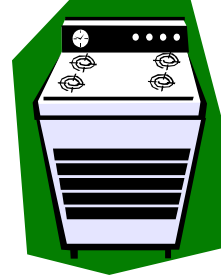
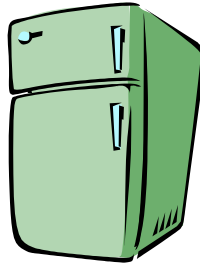
Loudoun County Solid Waste Management Plan

Rekindle the Spirit



36

Continue Special Wastes Recycling



Loudoun residents can recycle special materials at the LCSWMF, including appliances, tires, and refrigerants.

37

Expand Programs for Collecting Potentially Hazardous Materials

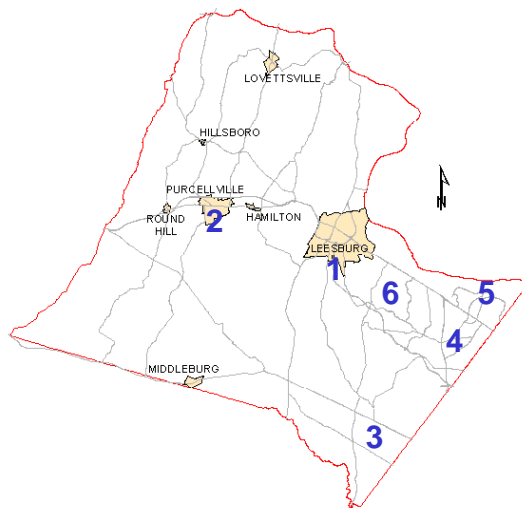
Special Wastes: These require special handling. Residents may drop off many of these materials at the Landfill DOC.



Household Hazardous Wastes (HHW): HHWs are wastes that are generated residentially and that can contaminate homes or the environment. 12 events are held each year to help residents dispose of HHW properly. 38

Loudoun County Solid Waste Management Plan

HHW Event Locations for 2003



- 1** Heritage High School, Leesburg, 3 events
- 2** Loudoun Valley High School, Purcellville, 1 event
- 3** South Riding, 1 event
- 4** Park View High School, Sterling, 1 event
- 5** Sterling Volunteer Fire Co. #18, Cascades, 1 event
- 6** Broad Run High School, Ashburn, 1 event

39

Loudoun County Solid Waste Management Plan

Maintain Environmental Control Systems at LCSWMF



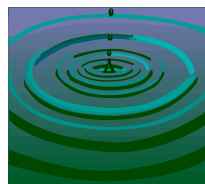
Collecting &
Treating
Leachate



Collecting &
Managing
Landfill Gas



Monitoring
Groundwater
Wells



Managing
Surface
Water
Runoff

40

Control Open Dumping and Litter



- Illegal dumping & farm dumps are problematic.
- OSWM responds to dump complaints.
- The County provides Landfill fee waivers to individuals cleaning up farm dumps and to organizations that clean up roadside litter.

41

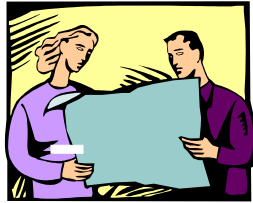
Local Solid Waste Ordinances

- **Chapter 1080** (design & operating standards for SWMFs & prohibits open dumping)
- **Chapter 1084** (standards for solid waste collection)
- **Chapter 1086** (requirements for recycling)

Recommend continued compliance with, and enforcement of Chapters 1080, 1084, and 1086.

42

Sustaining the Plan



The District will conduct formal biennial reviews to sustain the Solid Waste Management Plan.

- Ensure the system is functioning as envisioned.
- Confirm validity of the plan's assumptions on waste generation, facility capacity and external factors.
- Identify any revisions to the plan that may be appropriate.

43

Regional Planning Initiatives

- Request a regional planning agency to conduct a C&D generation and disposal study.
- Obtain an emergency debris waste management permit from DEQ.

44

Loudoun County Solid Waste Management Plan

Next Steps

- Board consideration and adoption of Plan, tentative April 2003
- Towns' consideration and adoption of Plan, tentative May 2003
- Transmittal of District Adopted Plan to DEQ, tentative June 2003
- Goal of July 1, 2003 will be met

45

Date of Meeting: April 8, 2003_

**BOARD OF SUPERVISORS
PUBLIC HEARING**

#2.

**SUBJECT: Loudoun County Solid Waste Management Planning District
Revised Solid Waste Management Plan**

ELECTION DISTRICT: Countywide

CRITICAL ACTION DATE: At the discretion of the Board

RECOMMENDATIONS:

Ad Hoc SWMP Committee: The Ad Hoc Solid Waste Management Planning Committee recommends that the Board of Supervisors and the Councils of the Towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill adopt the Draft Solid Waste Management Plan as submitted. Several minor revisions have been suggested since the work of the Committee was concluded.

Staff: Staff recommends that the Board of Supervisors place the adoption of the Draft Solid Waste Management Plan as contained in Attachment 1 and revised by Attachment 2, on the agenda of the April 21, 2003 Board meeting for action.

BACKGROUND:

The Virginia Solid Waste Management Planning regulations, 9 VAC 20-130-10 *et seq.*, require the Loudoun County Solid Waste Management Planning District (LCSWMPD) to submit a revised solid waste management plan to the Virginia Department of Environmental Quality by July 2004. This plan must address the solid waste management needs of the entire District for a period of 20 years. The LCSWMPD includes the Towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill, as well as the unincorporated portions of the County.

To address the plan requirement, the Board of Supervisors appointed Supervisors Kurtz, Towe, and Burton to an Ad Hoc Solid Waste Management Planning Committee (the Committee). Chairman Kurtz subsequently requested all seven towns to appoint a representative to the Committee. The town representatives include Mayor Reasoner, Hamilton, Mayor Morgart, Hillsboro, Tom Mason, Leesburg, Mayor Walker, Lovettsville, Charles Hartgrove, Middleburg, Marty Kloeden, Purcellville, and Kelly Yost, Round Hill.

During eight public meetings conducted from September 2002 to February 2003, the Committee reviewed descriptive information on solid waste and discussed solid waste management issues and options. The Committee developed a series of draft findings and recommendations and conducted a public feedback process on that information on January 8, 2003. Subsequently, the Committee considered the public input and finalized the Public Review Draft of the Loudoun County Solid Waste Management Plan that is the subject of this item. The Board of Supervisors is conducting this Public Hearing on behalf of all District members. An Executive Summary by Chairman Kurtz is included on page iii of the draft LCSWMP and is included as Attachment 3.

REVISED INFORMATION:

1. Updates based on CY2002 Collection Reports

Following the approval of the draft plan by the Ad Hoc Committee, staff received the CY2002 reports from the collection industry and the various solid waste management facilities that serve the County. This data was more current and complete than that in the plan. Staff revised the tables on waste generation amounts and rates, and collection demographics and included those revisions in the Public Review Draft that was advertised for Public Hearing.

2. Revised Graphs

While preparing her remarks for the Board briefing on March 17, Chairman Kurtz requested staff to modify the format of the facility capacity graphs on pages 3-12 and 3-13 of the Public Review Draft to make them easier to understand. The revised graphs were included in the handouts for the presentation. They will be included in the final adopted plan.

3. Continuing Revisions for Public Process

Chapter 1, Chapter 9, and Appendix B of the Plan are subject to continuing revision to describe and include the components of the public process. Copies of Board items such as this item, and items presented to Town Councils will be added to Appendix B. Copies of Resolutions of Adoption will be included in Chapter 1. Additional text describing the steps in the process will be added to Chapter 9. Authorization to make these changes is included in Attachment 2 of this item and in the draft motion.

SUPPLEMENTAL REQUEST FROM THE TOWNS:

During the development of the draft plan, the representatives of the Towns initially expressed interest in maintaining the current approach of contracting for collection services. Three of the towns have recently re-bid their collection contracts and two more will do so shortly. More recently, the Towns have discussed the need for more flexibility in this area. The representatives from the Towns of Middleburg, Purcellville, and Round Hill have submitted a request to modify language in the plan addressing the provision of collection services in the Towns. That request is included as Attachment 4. The sections of the plan text that would change are noted in Attachment 2.

SUPPLEMENTAL INFORMATION REQUESTED BY THE BOARD:

During the March 17, 2003 briefing on the plan, several Board members requested information to clarify several issues. The issue or question is in bold font, and the response is provided thereafter.

- **What is the remaining life of the currently constructed disposal capacity at the current disposal demand?**

The latest capacity assessment conducted in December 2002 shows there were 104,917 cubic yards of capacity remaining in Phases IIA/B, and 343,555 cubic yards remaining in Cell IIIA for a total capacity of 448,472 cubic yards. Current demand rates consume between 70,000-100,000 cubic yards per year. Therefore, this capacity will be depleted in 5 years and construction of replacement capacity would be needed in 3 years. This construction project is included in the CIP for FY06.

- **What is the impact on the life of the constructed capacity that results from the three scenarios considered for reducing the tipping fee at the County Landfill?**

Scenario 1(\$52.00/ton): Moves construction of Cell IIIB up one year to FY2005.

Scenario 2(\$50.00/ton): Moves construction of Cell IIIB up one year to FY2005.

Scenario 3(\$47.50/ton): Moves construction of Cell IIIB up two years to FY2004.

The schedule of these impacts will slip slightly depending on when the reduction takes place, and the collection industry's response to the reduction.

- **What is the estimated life of the total permitted capacity at the current demand rate?**

90-115 years

- **What is the estimated life of the total permitted capacity at the lowest tipping fee rate considered?**

65-80 years

- **What are the current MSW tipping fees for haulers at facilities serving Loudoun County?**

The Fairfax volume rate is \$39.95/ton, non-volume contract rate is \$45.00/ton. The Old Dominion TS charges \$45.00-56.00 per ton depending on the customer.

- **How many household hazardous waste collection events are held in the County at this time?**

OSWM is currently budgeted for 7 HHW collection events per year. This calendar year is an anomaly in that 8 events are planned.

- **Where are the HHW events scheduled?**

For CY2003, there will be 3 events at Heritage HS in Leesburg, 1 at Park View HS, 1 at Loudoun Valley HS, 1 at South Riding, 1 at Cascades Fire Station, and 1 at Broad Run HS in Ashburn.

- **What is the cost to open a new cell?**

Construction of new disposal capacity and eventual closure of that unit of disposal is conducted as a series of construction projects. Each project has a design element and a field construction element. New capacity is constructed as Cells or Phases. To avoid confusion in terminology, staff have adopted the term Sequences to describe units of closure construction. The new capacity units and the closure units do not occupy concurrent space. Therefore, there is no one-to-one comparison or relationship between Cell IIIA construction, and Cell IIIA Closure. Sequence II Closure overlaps a portion of Phase IIA/IIB and Cell IIIA. Sequence III Closure overlaps a portion of Cell IIIA and Cell IIIB. The following table provides a projected schedule for the design and construction projects in the existing landfill disposal unit (not Woods Road).

PROJECT	FY	SIZE (Acres)	Cost
Sequence II Closure Design	FY03	--	\$65,500
Sequence II Construction	FY05	6.6	\$2,101,000
Cell IIIB Design	FY05	--	\$310,000
Cell IIIB Construction	FY06	10.3	\$2,495,000
Cell IIIC*	FY13	9	\$3,450,000
Sequence III*	FY14	7	\$3,100,000
Sequence IV*	FY21	15.6	\$8,150,000

* These projects are long-term and subject to change. The figure includes estimated design and construction costs.

- **What is the status of the recycling DOC site at Park View High School?**

Staff discussed this issue with Evan Mohler, Assistant Superintendent for School Support Services, to confirm the current status. According to Mr. Mohler, there are no plans to disrupt or diminish the recycling DOC at Park View. Mr. Mohler stressed the need and desire to continue cooperative operations between solid waste management and the school system.

FISCAL IMPACT:

This plan is the service plan for the Office of Solid Waste Management. The general scope of responsibilities outlined in the plan is consistent with the service levels funded in the current budget with the following clarifications and exceptions:

1. **Expand HHW Collection**

The plan recommends the expansion of the household hazardous waste collection program from the current level of 7 events per year to a maximum of 12 events per year. No additional funding has been earmarked to address this recommendation. The estimated cost of an event is \$30,000. Staff anticipates that this matter would be addressed at some level in the FY05 budget request as an enhancement.

2. Expand Collection Program for Waste Oil and Antifreeze

The plan recommends the expansion of the waste oil, antifreeze, and other special waste collection program to a site in the eastern and the western portions of the County. These sites would need to be staffed or have some type of oversight. There are no specific proposals to address this recommendation at this time. To achieve cost-effective collection service, these programs must be co-located with some other type(s) of compatible programs. If options for one or both sites can be identified by the FY05 budget process, the Board could consider them at that time.

3. Western Loudoun Recycling Dropoff Center

The plan recommends the restoration of a recycling DOC in central western Loudoun. The operational costs have been included in the base budget of OSWM for several years as the County explored options for sites. The Board has included the site development funding in the recently approved FY04 budget. There are no other fiscal impacts of this recommendation.

4. Waste Exchange

The plan recommends the establishment of a waste exchange program that would assist individuals with surplus usable goods or materials in locating someone in need of such goods or materials. Normally, these surplus materials are disposed of as solid waste and such programs promote reuse in lieu of disposal. Staff will attempt to identify a Non Governmental Organization (NGO) to set up and operate this effort. Should that fail, the staff will explore development of a page on the County web site to support the exchange as a pilot to assess the level of effort to support the program. It is anticipated that such an effort can be accommodated within existing resources. If not, this project would be considered at some future budget process.

5. Reduced Landfill Tipping Fees

The plan recommends that landfill tipping fees be reduced. The fee reduction would increase revenues but at a level to balance revenue neutrality and conservation of disposal capacity. Any reduction within the ranges discussed will decrease the amount of local tax funding for the landfill operation while conserving disposal capacity.

6. Private-Public Partnership for Recycling Depot

The plan recommends that the County pursue a private-public partnership to design, construct, and operate a recycling depot at the County Landfill to increase the opportunities for the collection industry to recycle. The County would provide the space and all costs associated with design, construction and operation would be borne by the private partner. There would be a minor amount of startup costs to develop and process the RFP and serve as a liaison to the facility for the County. These costs could be absorbed by OSWM. There was a suggestion that a rental fee be imposed to offset the operational liaison role. The County, Towns and public-at-large should all see a significant long term decrease in recycling costs if this recommendation is successfully implemented.

DRAFT MOTIONS:

1. I move that the Board of Supervisors place the adoption of the Draft Solid Waste Management Plan as contained in Attachment 1 and revised by Attachment 2, on the agenda of the April 21, 2003 Board meeting for action.

OR

2. I move an alternate motion.

ATTACHMENTS:

Attachment 1: Draft Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District (**Reminder to Board Members- please bring the copy of the plan provided to you for the March 17th meeting**)

Attachment 2: Schedule of proposed modifications to the Committee approved SWMP

Attachment 3: Executive Summary of the Draft LCSWMP by Chairman Kurtz

Attachment 4: Revision to the Proposed LCSWMP requested by the Towns of Middleburg, Round Hill and Purcellville

STAFF CONTACT: Richard S. Weber, Director, OSMW

03-04-77

PUBLIC REVIEW DRAFT SOLID WASTE MANAGEMENT PLAN

FOR THE

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING DISTRICT

For the County of Loudoun
and the incorporated Towns of
Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg,
Purcellville, and Round Hill

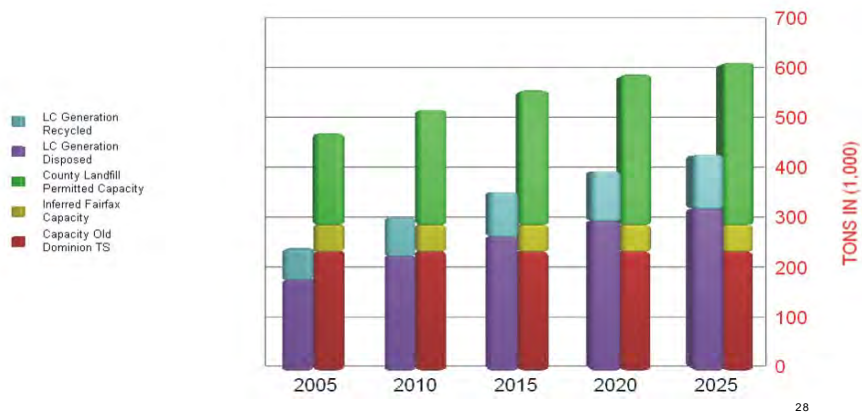
Editor's Note: Copies are of this Plan are available by calling the Office of Solid Waste Management at 703-777-0187 or by emailing oswm@loudoun.gov. This Plan can also be accessed on Loudoun County's website at www.loudoun.gov/oswm.

**Attachment 2. Proposed Modifications to the Public Review Draft
Solid Waste Management Plan
Loudoun County Solid Waste Management Planning District
Board of Supervisors Public Hearing Item #2
April 8, 2003**

1. Chapter 3, Figure 3-3

Replace the current Figure 3-3 for MSW with the following:

Loudoun County Solid Waste Management Plan
MSW System Capacity

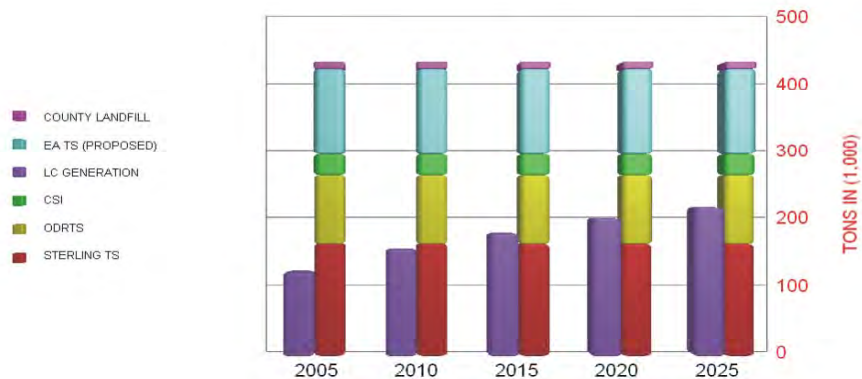


28

2. Chapter 3, Figure 3-4

Replace the current Figure 3-4 for C & D Waste with the following:

Loudoun County Solid Waste Management Plan
C&D Waste System Capacity

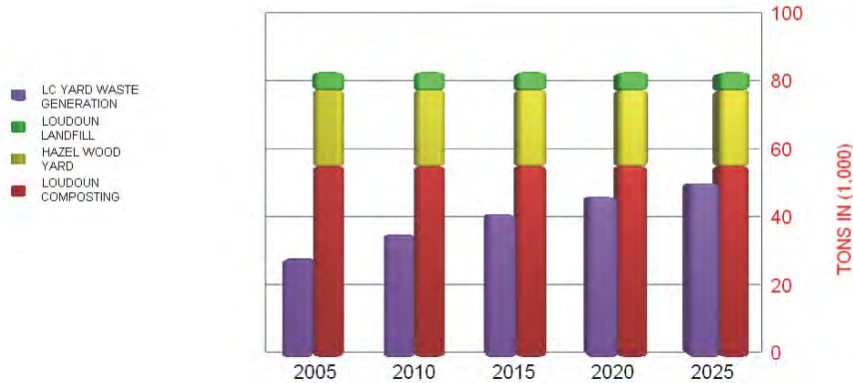


25

3. **Chapter 3, Figure 3-5**

Replace the current Figure 3-5 for Vegetative Waste with the following:

Loudoun County Solid Waste Management Plan
Vegetative Waste System Capacity



24

4. **Chapter 5.2 Bullet under Solid Waste Collection:**

Replace the existing bullet with The Towns may use contracted services or determine other means of collection at their discretion.

5. **Chapter 7.2.2, Objective B**

Add a sentence to the end of the existing sentence in paragraph one: The Towns may use contracted services or other means of providing for collection at their discretion. Add to the beginning of the existing sentence of paragraph four: When using contracted services to provide collection of solid waste and recycling, Towns will use contractual terms and conditions to ensure that minimum collection service levels are met in their jurisdictions.

6. **Revisions by Staff to Describe the Public Process:**

The Plan is not yet static but continues to add elements as it moves through the approval process. By approval of this attachment, governing bodies included in the District are authorizing OSWM staff to make revisions to Chapter 1, Chapter 9, and Appendix B as appropriate to describe the public process. These revisions include, but are not limited to Board items, Council items, Resolutions of Adoption, and general descriptions of the process.

Attachment 3. Executive Summary
Public Review Draft of the Solid Waste Management Plan
Loudoun County Solid Waste Management Planning District
Board of Supervisors Public Hearing Item #2
April 8, 2003

EXECUTIVE SUMMARY

The Charge

In July of 2002, I agreed to serve as Chair of the Ad Hoc Solid Waste Management Planning Committee (the Committee). The Committee's charge from the Board of Supervisors was to conduct a review of the Solid Waste Management Plan (SWMP) and to complete any and all revisions in time for a final approval by July 2003.

I soon realized that reviewing and revising the Solid Waste Management Plan was a multifaceted challenge. Solid waste management has technical, financial, environmental, legal, regulatory, political, policy, and marketplace dimensions. I also realized that, as a changing and growing County, the plan had to answer to many groups and individuals or stakeholders. These stakeholders included individual citizens, major solid waste customers and contract holders (Towns and HOA's), environmental advocacy groups, and the solid waste industry service providers who collect, transport, recycle and dispose of the solid waste generated in the nation's second fastest growing County. Participation from these stakeholders was very important in conducting a meaningful process and in creating a workable plan.

Satisfying Many Stakeholders

First of all, the plan had to meet the State regulations for solid waste management planning (9 VAC 20-130-10 *et seq.*). The regulations state that "every city, county, and town in the Commonwealth--singly or in conjunction with other jurisdictions as a planning district--must submit a completely revised solid waste management plan between July 1, 2003, and July 1, 2004."

Second, the plan had to address the solid waste management needs of the entire Loudoun County Solid Waste Management Planning District (LCSWMPD). The District includes the Towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill, as well as the unincorporated portions of the County. In addition to my Board colleagues, Supervisors Burton and Towe, I asked each Town to name an official representative to the Committee. I believe that I speak for each Committee member when I say that the cooperation between the County and the Towns has been most productive and gratifying in working together on this plan. It really WAS work and the Committee members were diligent in their attendance and in working through lengthy meetings full of complex discussions and decisions.

Finally, it was clear to me that the plan had to be developed through a process of collaboration with all the affected parties. An open and deliberative approach to the plan's development and review is not only required by State regulation, but has helped to ensure that the ideas and concerns of the varying individuals and constituent groups are served by the plan.

The Process

Prior to the first meeting, I sent background information to all members of the Board of Supervisors and to the Town representatives. The background information included the County's Solid Waste Ordinances, Summary reports on the activities and recommendations from previous solid waste citizens' committees, State regulations and requirements governing solid waste management planning, and the District's 1995 Solid Waste Management Plan.

I also sent letters of invitation and announcement of the planning process to approximately 150 organizations and individuals. The invitations went to permitted solid waste collectors, solid waste management facility operators, Large Homeowners' Associations (HOAs) and residential managers, leaders of Loudoun environmental groups, and respondents to the solid waste survey of businesses that had indicated an interest in the planning process. I encouraged these parties to attend meetings of the Ad Hoc SWMP Committee and advised them that more formal public input opportunities would be available.

The Committee met eight times between September 2002 and February 2003 with advance meeting notices placed on the public calendar; each meeting was open to the public for attendance. Copies of meeting packets and presentation materials were provided to the Committee in advance. The materials were also available at each meeting and available upon request. Members of the public who were in attendance often addressed the Committee to ask questions, provide information, or make comment. Each meeting had an agenda, a meeting summary from the previous meeting, records of straw votes from the previous meeting, and staff responses to requests for information or to the Committee's direction for action. In addition to meeting discussions, the Committee also received letters from interested parties and solid waste industry representatives. Copies of all letters and responses were provided to the Committee.

The first two meetings involved staff presentations on background information. By the second meeting and in several subsequent meetings, the Committee was considering a series of issues and options and began taking straw votes on issues regarding the District's solid waste management system. The votes on issues and options occurred through the October meetings with final resolution of outstanding issues decided in November. The Committee's decisions formed a series of Findings and Recommendations that were the subject of the January public input session and that ultimately became Chapter 5 of the plan.

Community Comments

The Committee responded to letters from members of the solid waste industry and initiated discussion on concerns for a lack of recycling infrastructure in the County, business interest in expanding into recycling operations, and a request to lower the tipping fees at the LCSWMF to foster competition, especially for independent solid waste collectors who do not have a facility in the County.

The Committee's findings reflect these discussions and recommend a public-private partnership to site, construct, and operate a recycling transfer station at the Loudoun County Landfill within a prescribed set of parameters. The Committee also spent considerable time on a particular company's request to lower the tipping fees at the LCSWMF to foster competition. This request

to consider relief to small independent solid waste haulers led to the Committee's request for more information. The request also provided guidance to staff that two objectives should be considered in reviewing the tipping fees – conservation of landfill capacity and a more revenue neutral operation that would cover operational and perhaps capital costs.

The County's solid waste consultant completed a preliminary study describing four scenarios, each with a goal of capturing increased waste stream percentages and on a given pricing structure. Each scenario also provided estimates of revenue that would be generated and the projected amount of landfill capacity that would be consumed. The Committee's findings include a recommendation that would adjust tipping fees at the Landfill with the dual goals of conserving capacity and revenue neutrality.

A public input session initially scheduled for December was postponed until January due to weather conditions. I sent 247 invitations to the growing list of interested parties. The list included the Board, Town Councils and Mayors, the largest HOA's and property management companies, environmental and other interest groups, individuals or groups who asked to be included on the outreach list, and solid waste industry representatives from the County's regulated solid waste community of permitted solid waste collectors and facility operators.

McCaffery Associates conducted this session using the small group networking process to allow key citizens, government and industry representatives to learn of the Plan's key elements, to react to the Committee's proposals, and to propose additions, deletions or changes to the Plan before it was finalized. Staff made brief presentations on the topics of collection, disposal, recycling, environmental protection, and policy, planning and public information, followed by a small group discussion of the Committee's recommendations for activities or policies on each respective topic.

The Committee had an additional meeting to consider the comments from the public input session. At its February 12, 2003 meeting, the Committee decided to send the Draft SWMP to the Board of Supervisors, recommending a Public Hearing and consideration by the Board of Supervisors and each member Town.

Major Plan Elements

The SWMP's major elements are:

- ◆ Introduction and Goals for the Plan (Chapter 1)
- ◆ Description of the Types and Quantities of Waste Generated in the District (Chapter 2)
- ◆ Description of the District's Solid Waste Management System including collection, transportation, transfer and processing facilities, disposal facilities and analyses of the capacity of these components to sustain service; a description of roles of the Towns, the County and the private sector solid waste industry in solid waste services; recycling rates and how to sustain and improve recycling; and issues and service gaps in the District's solid waste management system (Chapter 3).
- ◆ Solid Waste Hierarchy of Waste Reduction, Reuse, Recycling, Waste-to-Energy, and Landfilling (Chapter 4)
- ◆ Committee Findings (Chapter 5)

- ◆ Objectives and Ways to Implement the Plan Objectives (Chapters 6 and 7)
- ◆ Current and Future Funding for the Solid Waste Management Plan Objectives (Chapter 8); and
- ◆ Description of public participation in the Plan's formation (Chapter 9).

Major Committee Findings

Solid waste planning deficiencies:

- Regional planning agencies (MWCOG and/or NVPA) should conduct a study of construction and demolition waste to determine the quantity generated, the waste composition, the present disposition of the waste, and the capacity of the region to manage this waste for the next 20 years.
- The District should proactively plan and prepare for waste management services in natural and manmade disasters. Debris waste management permits and a protocol for provision of services, and reciprocal support agreements with other jurisdictions are key provisions of this effort.
- The District members will routinely review the provisions of the Solid Waste Management Plan and ensure that the solid waste management system is functioning as envisioned. The District members have committed to a formal biannual process that will assess the validity of the plan's assumptions on waste generation, facility capacity and external factors, and identify any revisions to the plan that may be appropriate.

The Committee recommends that the District's current reliance on private sector provision of solid waste collection services continue. Minimum service standards continue to be set by the Towns through contractual terms, and by the County through regulations.

Solid Waste Management Facilities:

- Facility capacity to process vegetative waste and construction and demolition waste is adequate to address all District needs during the 20 year planning period. No increases beyond those identified in the plan are needed or proposed.
- Facility capacity to process municipal solid waste is adequate to address the District's needs through the next 10 years. This finding will be closely monitored in the biennial review.
- The Committee recommended that the Board of Supervisors direct the County Administrator to develop and implement a plan that balances revenue neutrality with reasonable conservation of disposal capacity at the County's Solid Waste Management Facility.
- Lower tipping fees at the County facility respond to multiple private sector requests to foster competition in the collection segment of the industry.

Increase recycling and material reuse levels in the District to ensure compliance with State recycling mandates:

- Address the most critical deficit in rural recycling opportunities by immediately funding, constructing, and operating a Recycling Dropoff Center (DOC) in the Purcellville area.
- Provide DOCs as a routine part of capital facilities planning for every regional government facility.

- Pursue a private/public partnership to construct and operate a recycling depot at the County Solid Waste Management Facility to reduce or eliminate financial barriers to effective recycling currently faced by the providers of collection services.
- Rekindle the generic Recycling benefits message of the 1970s.
- Work to establish a waste exchange program that allows reuse of materials instead of disposal.

Environmental Protection initiatives:

- Increase the opportunity for Loudoun residents to dispose of household hazardous waste (HHW) by increasing the number of HHW collection events.
- Increase the opportunity for Loudoun residents to dispose of waste oil, antifreeze, and other special wastes by siting, construction, and operation of special waste collection centers in the eastern and western portions of the County.
- Increase the County regulatory oversight over processing and disposal of waste dirt, and burning of solid waste.

Implementation

The plan calls for scheduled annual reporting to the District and biennial review by the District. The annual report from Solid Waste Management Staff will keep District members apprised of the annual status of solid waste. The routine review of the District's solid waste management system every two years creates a system of accountability to determine if the system is working as anticipated or whether emerging conditions warrant a change. This feature of this Plan helps to guarantee the plan's viability over time by establishing an alert mechanism to signal a call for action.

Transmittal

I am grateful to the Committee and staff who have worked so diligently in developing this plan. I am especially grateful to the individual citizens, community group representatives, and members of the solid waste industry who spent their evenings at Committee meetings, even after a long day's work.

It is a privilege to submit this Solid Waste Management Plan for your consideration. I am confident that the Plan will guide our solid waste service providers in delivering services and will serve our citizens in providing safe and effective solid waste management practices.

Respectfully Submitted,



Sally R. Kurtz, Chair
Ad Hoc Solid Waste Management Planning Committee

Editors Note: This Executive Summary was retrieved verbatim from the Public Review Draft of the Loudoun County Solid Waste Management Plan.



March 14, 2003

Richard S. Weber, Director
Loudoun County Solid Waste Management
906 Trailview Blvd S.E.
Suite B
Leesburg, VA 20175

Dear Mr. Weber,

I have discussed the following with Mr. Charles Hartgrove from the Town of Middleburg and with Mr. Martin Kloeden from the Town of Purcellville. The three of us have served on the Solid Waste Management Planning Committee. We would request that the following amendments be made to the proposed plan.

Chapter 5.2, Bullet 3 under Solid Waste Collection:

- The Towns may use contracted services or determine other means of collection at their discretion.

Chapter 7.2.2, Objective B:

- When using contracted services to provide collection of solid waste and recycling, Towns will use contractual terms and conditions to ensure that minimum collection service levels are met in their jurisdictions.

These proposed amendments should provide the towns with flexibility deemed acceptable by our respective Councils, when considering the plan for adoption by resolution.

Again, my greatest thanks to the many County Staff and Supervisors that have worked diligently on our behalf.

Sincerely,

Kelly D. Yost
Town Administrator

Cc: Scott K. York, Board of Supervisors, Chairman
Sally R. Kurtz, Board of Supervisors
Kirby Bowers, County Administrator
John Wells, Deputy County Administrator

Date of Meeting: April 21, 2003

#8.

**BOARD OF SUPERVISORS
ACTION ITEM**

SUBJECT: Loudoun County Solid Waste Management Planning District
Revised Solid Waste Management Plan

ELECTION DISTRICT: Countywide

CRITICAL ACTION DATE: At the discretion of the Board

RECOMMENDATIONS:

Board: The Board conducted a Public Hearing on the draft plan, as amended by Attachment 2 on April 8, 2003, on behalf of the entire District. Six members of the public addressed the Board on the draft plan. Issues raised in those comments as well as one letter to the Board have been addressed in the body of this item. Additional BOS questions were also raised. The Board forwarded the Plan as advertised (Attachment 1) and revised by Attachment 2 to a Committee of the Whole scheduled on April 21, 2003, for discussion and action.

Ad Hoc SWMP Committee: The Ad Hoc Solid Waste Management Planning Committee recommends that the Board of Supervisors and the Councils of the Towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill adopt the Draft Solid Waste Management Plan as submitted. Several minor revisions have been suggested since the work of the Committee was concluded. Draft motion #1 implements the Committee and staff recommendation.

Staff: Staff recommends that the Board of Supervisors approve the Draft Solid Waste Management Plan as contained in Attachment 1 and revised by Attachment 2

BACKGROUND:

The Virginia Solid Waste Management Planning regulations, 9 VAC 20-130-10 *et seq.*, require the Loudoun County Solid Waste Management Planning District (LCSWMPD) to submit a revised solid waste management plan to the Virginia Department of Environmental Quality by July 2004. This plan must address the solid waste management needs of the entire District for a period of 20 years. The LCSWMPD includes the Towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill, as well as the unincorporated portions of the County.

PUBLIC HEARING:

The Board conducted a Public Hearing on the draft plan as revised by Attachment 2 on April 8, 2003. The public notice for this hearing ran in the *Loudoun Times-Mirror* on March 19 and March 26, 2003. The Board conducted the Public Hearing on behalf of the seven incorporated town governments, and the unincorporated areas of the County. Six members of the public addressed the Board/District on the plan.

Four speakers spoke in favor of lowering the tipping fees at the County Solid Waste Management Facility to achieve revenue neutrality and to increase competition in the collection industry. Several speakers spoke in favor of the plan recommendation to develop a recycling depot at the County SWMF through a private/public partnership.

Two speakers raised issues to the Board and several Board members requested supplemental information from staff. In addition to the speakers, the Board received written comments from Ticonderoga Farms, Inc. A transcript of the public comments from the Public Hearing is memorialized in Attachment 4.

ISSUES:

1. Provision of Publicly Funded Collection Services in the Village of Saint Louis

One of the speakers at the public hearing urged the Board to consider provision of publicly funded solid waste collection services to the residents of the Village of Saint Louis to address a purported health hazard. The concept of franchising and service districts was raised as a topic in the issues and options discussion before the SWMPC. The context of this discussion was how to ensure the adequate and equitable provision of collection services in rural Loudoun. The Committee decided not to pursue that option at this time.

The draft plan, as presented, recommends continued reliance on the private sector collection services. No County Government resources are currently allocated to this effort. Unless directed otherwise by the Board, no modifications to the Plan on this matter are proposed. Should the Board desire to consider this matter further, it raises significant policy and budgetary issues that could be addressed by a future amendment to the LCSWMP.

2. Comments from Ticonderoga Farms, Inc.

Ticonderoga Farms, Inc. submitted written comments to the Board dated April 4, 2003. While TFI appears supportive of much of the Draft Plan, two issues were raised on the desire to have additional or broader exemptions for agriculturally based composting operations and concerns over the Plan recommendations that the County adopt provisions regulating the use and disposal of waste dirt.

Exemptions from Solid Waste Facilities Ordinances for Agricultural-based Composting

An extensive amount of text is included in the Solid Waste Management Plan pertaining to recycling opportunities. With respect to yard waste composting, Chapter 1080 (Solid Waste Management Facilities) has an exemption from permitting requirements for small-scale composting operations (up to 500 cubic yards per year) as long as no money or other compensation is taken for accepting the yard waste and no nuisance or environmental harm is caused.

The SWMP and Chapter 1080 do not distinguish between large-scale composting at an agricultural versus a commercial site because the composting activity itself can cause serious nuisance or environmental damage regardless of the location of the composting operation. In fact, the Virginia Department of Environmental Quality required TFI to close its yard waste composting operations in 1999 for failure to comply with Virginia's surface water and solid waste regulations.

Chapter 1080 is consistent with State law as the Virginia Waste Management Act specifically grants localities the authority to regulate yard waste composting facilities. Furthermore, the permitting exemptions under State regulations require that the facility be in compliance with the standards of all local ordinances. A yard waste composting facility is exempt from State permitting requirements only if that facility conforms to all County laws.

Concerns Raised with the Plan Recommendation to Regulate Waste Dirt

The Draft Plan recommends that the County Board of Supervisors amend Chapter 1080, the Zoning Ordinance, and other County ordinances as appropriate to restrict unauthorized dumping of waste dirt, to regulate surface piles of waste dirt, and to regulate soil processing. TFI has expressed a concern regarding the impact of this recommendation on agricultural or farm-based reuse of waste dirt.

The Committee discussed extensively the need to regulate the use of waste dirt in rural areas. Their determination was that it was appropriate in some locations of the County. However, the Committee felt strongly that the scale of operations needed to be controlled, locational criteria needed to be established, a site analysis was needed, and potential impacts needed to be resolved. These are the topical areas that would be addressed in the recommended regulation.

As is the case with other solid wastes, there is a substantial financial incentive that accrues to the acceptor of waste dirt. The generator pays to get rid of waste dirt. The proposed regulatory approach would establish a framework by which this practice could occur while ensuring that the environment and the quality of life in areas surrounding the recipient are protected. Adopting regulations does not preclude the use of waste dirt by agricultural landowners. The plan does, however, recommend some restrictions as to where, how and when dirt can be accepted.

3. Response to Questions from Board Members

Several Board members indicated that they had technical questions that they desired staff responses to. These questions and staff responses are included in Attachment 5.

4. Consistency of the Draft Plan with the County's Revised General Plan

The County Planning staff have reviewed the Draft Solid Waste Management Plan and have found it consistent with the Revised County General Plan. Their referral is included as Attachment 6.

5. Continuing Revisions for Public Process

Chapter 1, Chapter 9, and Appendix B of the Plan are subject to continuing revision to describe and include the components and results of the public process. Copies of Board items such as this item, and items presented to Town Councils will be added to Appendix B. Copies of Resolutions of Adoption will be included in Chapter 1. Additional text describing the steps in the process will be added to Chapter 9. Authorization to make these changes is included in Attachment 2 of this item and in the draft motion.

FISCAL IMPACT:

This plan is the service plan for the Office of Solid Waste Management. The fiscal impact of plan adoption and implementation was described in detail in the Public Hearing Item.

DRAFT MOTIONS:

1. I move that the Board of Supervisors adopt the Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District as contained in Attachment 1 and as revised by Attachment 2. I further move that the Chair be authorized to sign the Resolution of Approval (Attachment 3), and that staff be authorized and directed to submit the LCSWMP to the Virginia Department of Environmental Quality upon adoption by all District members and to follow up the Plan's approval and to make only editorial revisions necessary to insure consistency.

OR

2. I move an alternate motion.

ATTACHMENTS:

Attachment 1: Draft Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District (**Reminder to Board Members- please bring the copy of the plan provided to you for the March 17th meeting**)

- Attachment 2:** Proposed Modifications to the Public Review Draft
- Attachment 3:** Resolution of Approval
- Attachment 4:** Transcript of Public Comment at the Public Hearing
- Attachment 5:** Responses to Questions from Board Members
- Attachment 6:** Consistency with Revised County General Plan Referral, March 28, 2003

STAFF CONTACT: Richard S. Weber, Director, OSWM

PUBLIC REVIEW DRAFT SOLID WASTE MANAGEMENT PLAN

FOR THE

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING DISTRICT

For the County of Loudoun
and the incorporated Towns of
Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg,
Purcellville, and Round Hill

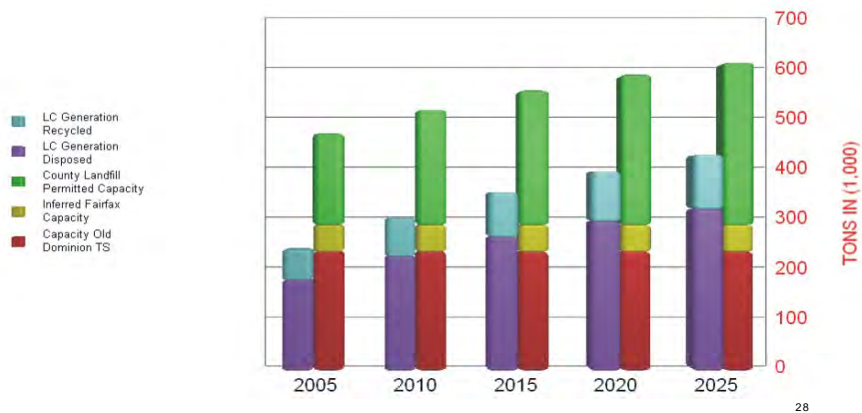
Editor's Note: Copies are of this Plan are available by calling the Office of Solid Waste Management at 703-777-0187 or by emailing oswm@loudoun.gov. This Plan can also be accessed on Loudoun County's website at www.loudoun.gov/oswm.

**Attachment 2. Proposed Modifications to the Public Review Draft
Solid Waste Management Plan
Loudoun County Solid Waste Management Planning District
Board of Supervisors Action Item #8
April 21, 2003**

1. Chapter 3, Figure 3-3

Replace the current Figure 3-3 for MSW with the following:

Loudoun County Solid Waste Management Plan
MSW System Capacity

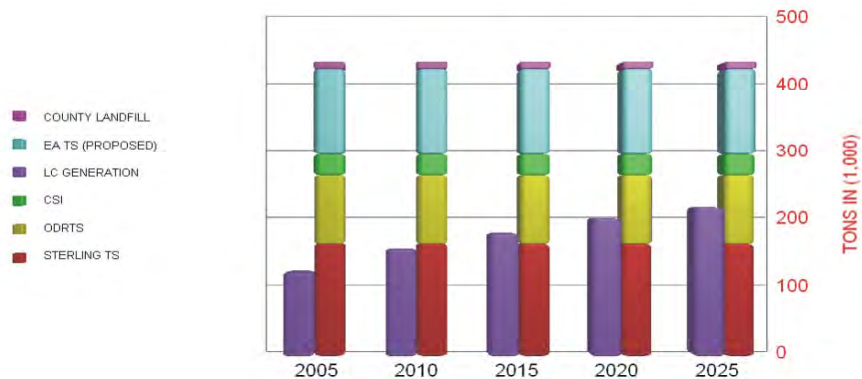


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2. Chapter 3, Figure 3-4

Replace the current Figure 3-4 for C & D Waste with the following:

Loudoun County Solid Waste Management Plan
C&D Waste System Capacity

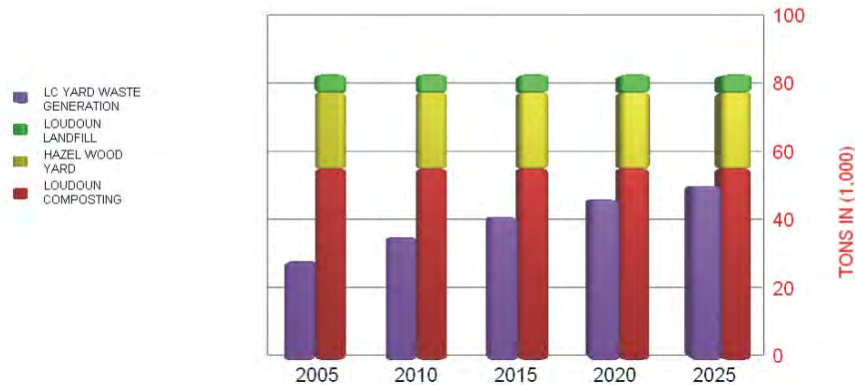


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3. **Chapter 3, Figure 3-5**

Replace the current Figure 3-5 for Vegetative Waste with the following:

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Vegetative Waste System Capacity



24

4. **Chapter 5.2 Bullet under Solid Waste Collection:**

Replace the existing bullet with The Towns may use contracted services or determine other means of collection at their discretion.

5. **Chapter 7.2.2, Objective B**

Add a sentence to the end of the existing sentence in paragraph one: The Towns may use contracted services or other means of providing for collection at their discretion. Add to the beginning of the existing sentence of paragraph four: When using contracted services to provide collection of solid waste and recycling, Towns will use contractual terms and conditions to ensure that minimum collection service levels are met in their jurisdictions.

6. **Revisions by Staff to Describe the Public Process:**

The Plan is not yet static but continues to add elements as it moves through the approval process. By approval of this attachment, governing bodies included in the District are authorizing OSWM staff to make revisions to Chapter 1, Chapter 9, and Appendix B as appropriate to describe the public process. These revisions include, but are not limited to Board items, Council items, Resolutions of Adoption, and general descriptions of the process.

7. **Authorization for Staff to Make Typographical Corrections:**

Staff is authorized to make editorial and typographical corrections to the Plan text to ensure consistency or clarity.

**Attachment 3. Resolution of Approval
Solid Waste Management Plan
Loudoun County Solid Waste Management Planning District
Board of Supervisors Action Item #8
April 21, 2003**

A RESOLUTION: That the County of Loudoun adopt the Solid Waste Management Plan dated March 17, 2003, as revised for and by the Public Hearing conducted on April 8, 2003, for The Loudoun County Solid Waste Management Planning District (LCSWMPD).

The Loudoun County Board of Supervisors, in a regular meeting on April 21, 2003, adopted the following:

WHEREAS, Loudoun County, the Town of Hamilton, the Town of Hillsboro, the Town of Leesburg, the Town of Lovettsville, the Town of Middleburg, the Town of Purcellville, and the Town of Round Hill are the local governments for the residents living within the boundaries of Loudoun County, and comprise the LCSWMP District and

WHEREAS, the Virginia Waste Management Board (hereinafter the State) has been authorized by State Code to promulgate and enforce such regulations as may be necessary to carry out its duties and powers and the intent of the Virginia Waste Management Act and related federal acts, and

WHEREAS, it is the policy of the State to require each city, county, and town to develop and maintain comprehensive and integrated solid waste management plans that, at a minimum, address all solid waste generated in the jurisdiction, and consider all components of the following hierarchy:

- Source Reduction
- Reuse
- Recycling
- Resource Recovery (Waste-to-Energy)
- Incineration
- Landfilling, and
- Plan Implementation, and

WHEREAS, the State has mandated that all localities sustain a recycling rate of 25%, and

WHEREAS, the State has required all local governments to update their Solid Waste Management Plans for current conditions and to address the solid waste management needs for the next 20 years, and

WHEREAS, all updated plans must be submitted to the Virginia Department of Environmental Quality by July, 1 2004,

NOW, THEREFORE BE IT RESOLVED, the Board of Supervisors does hereby authorize the Town of Leesburg to join and participate in the LCSWMPD, which currently includes the Towns of Hamilton, Hillsboro, Lovettsville, Middleburg, Purcellville, Round Hill , and the unincorporated portions of Loudoun County, with the same benefits and privileges as existing members, and requests that the other member jurisdictions likewise concur,

BE IT FURTHER RESOLVED, the Loudoun County Board of Supervisors does hereby adopt the Loudoun County Solid Waste Management Plan (presented at the April 8, 2003 Public Hearing, as revised),

BE IT FURTHER RESOLVED, the Board of Supervisors directs and authorizes the staff of the County Office of Solid Waste Management to submit the adopted Solid Waste Management Plan to the Virginia Department of Environmental Quality on behalf of the District.

Recorded Vote: _____

Moved by: _____

Seconded by: _____

Year: _____ Nays: _____ Abstain: _____

ATTEST:

Clerk of Board

**Attachment 4. Transcript of Public Comment at the Public Hearing
Solid Waste Management Plan
Loudoun County Solid Waste Management Planning District
Board of Supervisors Action Item #8
April 21, 2003**

This is a transcript of a portion of the Loudoun County Board of Supervisors Public Hearing held at 6:30 p.m. on Tuesday, April 8, 2003. This was item #2 on the agenda.

Ad Hoc SWMP Committee Chair Sally Kurtz:

[Presentation of the Draft Solid Waste Management Plan]

Board Chairman Scott York:

Thank you Ms. Kurtz. Sally had asked about possibly suspending the rules this evening on this, and I said no. I'm not in favor of doing that because I want to send this to the Committee of the Whole for a discussion on points. I do have several questions I would like to ask staff to respond to, not this evening, but hopefully we will be able to get some form of a response to the questions if the motion is to take it to the next Board business meeting and have a Committee of the Whole discussion. I would just briefly say that again I will reiterate my concern by lowering the tipping fees that we are just inviting a lot of folks to use the landfill, our only landfill in this County, and I think given the situation that we have the opportunity to haul our waste out of County we should keep all advantage of hauling the waste out of the County and preserve this precious resource even if what we have is the ability to use it for 50 years or so. So Rick, whatever you could do to answer these questions by the 21st would be helpful. Yes Mr. Hiatt.

Board Member Drew Hiatt:

When Sally last presented this I had also asked staff to respond to some questions I had, and I don't believe I've seen those yet. I might be mistaken, but I would like to ask staff to go back and respond to those by the 21st as well.

Board Member Sally Kurtz:

Mr. Hiatt I think if you'll look in your item were there any other questions that you had other than the ones that were answered here? [inaudible] currently constructed disposal capacity? That sort of thing. It seems to me that quite a few that are answered.

Board Member Drew Hiatt:

[Response not audible]

Office of Solid Waste Management Director Richard Weber:

Those are the questions that we understood that you had asked. If that is not what you asked then we need to try again.

Board Member Drew Hiatt:

Ok let me read this through. I didn't recognize these as my questions. I did ask some questions about what the tonnage would be and what the capacity would be. Let me take a look at these

and get back to you if I need more. Does it say somewhere in here that [not audible] identify them as my questions?

OSWM Director Richard Weber:

Those questions that are responded to on page 3 are all the responses to all the questions that we believe the Board members asked.

Board Chairman Scott York:

Mr. Delgaudio?

Board Member Eugene Delgaudio:

Mr. Chairman do we have members of the public signed up?

Board Chairman Scott York:

Yes we do.

Board Member Eugene Delgaudio:

Ok. We should hear from them before we hear your motion.

Board Chairman Scott York:

No it would be Ms. Kurtz's motion but yes. Correct. Any other questions of staff? All right, seeing none.

Board Member Charles Harris:

I had a quick question.

Board Chairman Scott York:

Yes Mr. Harris.

Board Member Charles Harris:

I was asleep at the wheel. In line with questions. I guess what I'll do is I'll write it out, but I'd like to know what our legislative authority is within the County to reduce packaging volume? Is there anything we can do as a Board to require retail sales to do prudent packaging rather than two-foot by two-foot plastic containers for a small item? Without a lot of effort? Do we have any legislative authority that we can reduce the amount of solid waste that is produced and require retailers to do reasonable things concerning packaging?

County Attorney John Roberts:

I would be glad to look into that. I believe there are going to be some difficulties because you are really dealing with interstate commerce if the goods are not generated here.

Board Member Charles Harris:

That would be good. If we could identify that it was interstate then that means then we could go to our federal representatives to do something reasonable with unreasonable packaging.

County Attorney John Roberts:

The only other thing I can add is that many many years ago I think that Loudoun tried to have a local bottle bill and that failed and that was a subject that came up in the General Assembly year after year, and there never was the enabling authority to do that. That's the only kind of related packaging kind of issue. I think it's going to be problematic to find local authority that can get at the way people package their goods.

Board Member Charles Harris:

Ok. Whatever we have authority to do I would like to know about.

Board Chairman Scott York:

Thank you. Our first member signed up to speak on this item is Martin Kloeden to be followed by Susan Gleba.

SWMPC Purcellville Representative Martin Kloeden:

Good evening ladies and gentleman, the Board of Supervisors, and everyone gathered here. My name is Martin Kloeden. That is K-L-O-E-D-E-N. I am a retired police sergeant from the Bristol Police Department. I now work as an Assistant to the Town Manager of Purcellville. I would like to preface my comments by saying thank you on behalf of the people and the Town of Purcellville both to the Board of Supervisors for your invitation to join the Waste Management Planning District. It is a colossal task that a town as small as ours would have a very great difficulty doing on its own so we appreciate the opportunity to participate.

I myself have no background in solid waste management so I have learned a lot over the course of the weeks we were working together. And it was interesting. I would specifically like to thank Supervisors Kurtz, Burton, and my personal Supervisor in Blue Ridge District, Eleanor Towe, for their tireless work on behalf of the Committee. Supervisor Kurtz was our Chairman. Chairwoman I should say, Chairperson. She acted tirelessly. She was very confident. She made the work easy, and she should be complimented for that, and I give my compliments.

I would also like to thank Mr. Rick Weber and his staff at the Office of Solid Waste Management. They worked, I put down magnificently because as I said I was a novice and had no idea what I was doing, but they made issues very clear. They clarified things I did not understand. They presented them in a way that we could understand them and make, I hope, rational decisions on them. I'd also like to thank my colleges from the various towns and other citizens that were on our Committee. Their insight was absolutely wonderful. Without the knowledge we had from our various public input sessions, what have you, I don't think the document would have been what it is today.

I would like to ask though that before the DOC station, the drop-off recycling station, is placed in western Loudoun in the Purcellville area if our Council could be notified in writing prior to that in case there are any concerns or issues they may have. I've heard that from them. I would greatly appreciate that.

I would just like to say that the Solid Waste Management Plan stands as a shining example of County-wide cooperation amongst all seven incorporated towns, quite a few interested businesses, and citizens, and not only do we meet the State mandates, but we have gone way beyond that. We've looked at the future of solid waste, which is an important issue in a County such as ours that is growing and generating waste in a much greater amount every day, and I think we have a document we can be proud of. The Town is very happy to have been a part of this process. We would like to thank the County once again and we would like to thank the Office of Solid Waste Management, specifically the three Supervisors I mentioned earlier for their invitation.

Wrapping that up, I would like to speak personally as a resident of Loudoun. I live in Philomont, Blue Ridge District. The two issues that struck me as a citizen in this plan, one is I have rural trash pick up, obviously I pay for it myself, and the large hauler I was using all the years I lived in Philomont jacked my prices up almost on a yearly basis. Finally they got to a point where they were almost flippant with me and said well you can take it or leave it, and I left it. Because I found out that there are small haulers in Loudoun that are doing an exceptional service especially to the rural residents, and they are doing it in a way that is cost effective. I actually cut my rate in half switching to a small hauler, a husband and wife team. They use our County landfill to take my trash, which I think is good because I am a Loudoun resident, and it's my landfill.

Therefore, what I am trying to get at is that these revenue neutral ideas we have in our plan should be looked at rather intensely. Not only are we talking about tax dollars that are subsidizing the operation of the landfill in a fiscal environment that is very tight, but right now if you look at the document we are going to go into the red if we are not already in the red. I believe that as a taxpayer we should try to operate in the black. But as corollary of that we're going to be helping the small hauler. We are going to be increasing competition at the smallest level of our society, and I believe the small hauler in our market is the shining example of capitalism in the market economy at work. I'd like to see the Board of Supervisors recognize that and do so by lowering the tipping fees in our County Landfill. Why do we have a landfill if we are not going to use it? We still have 80 years of capacity even with a reduced fee. That's all. I'll get off my soapbox, and once again the Town of Purcellville is proud to participate. I'd like to thank you once again, and I guess in five years we do it again? Thank you very much.

Board Chairman Scott York:

Thank you Martin. Can I quickly ask you what you are paying now for your trash service?

SWMPC Purcellville Representative Martin Kloeden:

All right. Yes sir. Chairman, I pay twenty dollars a month. I'll give you an example. I won't mention any company. I was jacked up to forty dollars a month by a large hauler. I had to haul my trash cans down to the end of the driveway, which I live a ways down. We live on a dirt road. One of the reasons I retired from the police department was due to a heart condition, so I can't lift. It is getting really difficult for my wife to haul it down there and then when they. I remember the conversation on the telephone. They were flippant with me, this big company. I mean who knows who I was talking to, probably in Nebraska. I mean I don't know where they

were. They basically said take it or leave it. I called. I was mad because they had jacked me up to forty bucks. So I left it, and I found another hauler my neighbor was using for twenty dollars, fifty percent reduction. This gentleman and his wife come up to my house and get my trash cans from. I basically slide them out ten feet, and he has never missed a day unless it is a twenty inch snow.

Board Chairman Scott York:

That is twenty dollars a month, and how many times do they pick up a week?

SWMPC Purcellville Representative Martin Kloeden:

Once a week just like my old hauler. Same frequency of pick up.

Board Chairman Scott York:

Ok.

SWMPC Purcellville Representative Martin Kloeden:

That's an option I wish we would encourage. This is mom and pop. You know just like a mom and pop grocery store and a mom and pop trash hauler. That's capitalism at work. That's the market place.

Board Chairman Scott York:

Very good. Thank you. I appreciate that. Our next speaker is Susan Gleba to be followed by Steve Cawthron.

Susan Gleba:

Good evening. My name is Susan Gleba, G-L-E-B-A. I'm with AAA Recycling and Trash Removal Services in Fairfax, Virginia. I have participated in the management plan so far. I wanted to make two comments. One, that AAA does support a public-private partnership for a recycling facility here in the County. We're currently transporting the recycling outside of the County, and we support that. Also we support a decrease in landfill tipping fees. We are taking a majority of the solid waste out of the County. It seems as though that would seem to be advantageous to the County to take a look at, and we would support that. Thank you.

Board Chairman Scott York:

Thank you Susan. Our next speaker is Steve Cawthron to be followed by Albert Bland.

Steve Cawthron:

Good evening Mr. Chairman and members of the Board. My name is Steve Cawthron, C-A-W-T-H-R-O-N. I first like to congratulate Ms. Kurtz for doing an outstanding job in leading the AdHoc Committee. She really went above and beyond the call of duty. I don't know how many hours that Ms. Kurtz put into this project, but I know it was very extensive. Also Mr. Burton and Ms. Towe and the other members, the Town representatives did an excellent job and ended up with what I believe is a very fine product for the citizens of the County.

I also need to acknowledge the diligent efforts of the Office of Solid Waste Management staff, who after working with them for nine years now on your Board's Special Exception Review Committee. I can attest to their professionalism and the firm belief in what they do for this County and the citizens. I want to thank them for that. The process, as has been mentioned already, was a very open process that developed this draft plan, a very productive one, and it was a real pleasure to see all the Towns and the County officials working together so well.

I'll skip over many of the good points of the plan because Ms. Kurtz has already mentioned those this evening, but I do want to address the question of the revenue neutral fee structure. I believe this is a rare opportunity for the Board of Supervisors, and very few programs have the opportunity to fund their own operating, capital, and debt service, and this is one of those opportunities. I would strongly support and recommend to the Board that they take advantage of this opportunity. Again it's a well thought out and comprehensive plan, and I urge the Board to adopt as it's recommended. Thank you very much.

Board Chairman Scott York:

Thank you Steve. Our next speaker is Albert Bland followed by Douglas Johnston.

Albert Bland:

Mr. Chairman and members of the Board. Albert Bland, B-L-A-N-D, from the Village of St. Louis. In 1995 we weren't offered to participate, as we are one of the incorporated villages in Loudoun County. As you know, personally yourself, when you had the feasibility study in '68, that we were considered a health hazard, and we worked like I don't know what to get the system out there. It's improved our community. Also, we have a lot of senior citizens out there that cannot afford to have the private haulers the gentleman talked about to come and get it. So most of the time I assume they burn the trash in yard and they put [inaudible] which don't burn. If this Board can find it to include this Village of St. Louis [inaudible] to pick this trash up it would be a great help to our community in stopping this health hazard thing, which we had years ago. We would really appreciate it if you would help us. Thank you very much.

Board Chairman Scott York:

Thank you Albert. Our next speaker is Douglas Johnston to be followed by Thomas Mason.

Douglas Johnston:

Thank you Mr. Chairman. My name is Douglas Johnston. I'm General Manager with Ticonderoga Farms in Chantilly, Virginia. I don't do this often, compliments to this report. It is just volumes of information. Well done. Mr. Chairman and members of the Board as you may know we submitted a response to this document on Friday, April 4th. The essence of those comments was to consider the incorporation and the value agricultural facilities in management of off-site burdens of dirt, should that become a regulated subject item.

The agricultural use of dirt from projects with overburdens has been a common practice in Virginia. The [inaudible] gardens at Ticonderoga Farms have contributed to the success of projects including the Hospital Center at Landsdowne, the County Government Center, the new Howard Hughes Medical Center, several projects at Dulles Airport, school projects here in the

County, as well as naturally various road reconstruction, to name a few. The one policy issue that is of some concern is if there becomes a classification for a waste dirt product, different from a contaminated soil product, is this going to mean that the facilities that generate essentially indigenous inert material are a waste generator and that the truck hauling it and the people handling it are now required to get licensed waste permits or is it more geared to the facility? I did not draw that distinction from this report and with that I want to thank you for the opportunity to speak.

Board Chairman Scott York:

Thank you Doug. We'll look into that and have an answer for you on the 21st.

Douglas Johnston

Very good. Thank you.

Board Chairman Scott York:

Thomas Mason is our concluding speaker.

SWMPC Leesburg Representative Thomas Mason:

Good evening Mr. Chairman and members of the Board. Thank you for the opportunity to speak tonight. I'm Tom Mason. I'm the Director of Engineering and Public Works for the Town of Leesburg, and I'm speaking as a member of the Planning Committee that was set up to help prepare this plan, which is presented in Public Hearing for you tonight. I'd first like to thank the Board members who participated, particularly Ms. Kurtz, whose leadership of this group enabled the creation of the plan that's been presented, and Mr. Burton, whose advice during this process was extremely beneficial, and Ms. Towe, who is not here tonight, but she was always there, and always had excellent suggestions in the conversation. Also thanks to the Loudoun County Solid Waste Management staff, who provided just wonderful technical information and support throughout the whole process.

Just a few points I'd like to make about the plan and express support for it in that among many things that it does is to continue the reliance on the private sector to provide solid waste collection services. It also promotes the continuation of the County ownership and operation of a multifaceted solid waste facility ensuring that all residents and businesses in the District have options for disposal of solid waste. I also support the proposal for including revenue neutrality through a revised landfill pricing structure that would require less local tax funding for solid waste management facility operations and capital construction and would foster competition among independent collectors and would continue to manage the capacity as an asset with long-term value to the District.

The plan also increases the availability of waste oil, waste antifreeze, and other special collection services in the County, and increases the number and distribution of household hazardous waste collection in the County. It also has provisions to ensure protection of the environment while increasing the regulatory oversight for the management of waste dirt and the burning of solid waste. That's all I have tonight. I would be glad to answer any questions, but I am here to

recommend that the Board consider adoption of the plan as presented and proposed by the Committee. Thank you.

Board Chairman Scott York:

Thank you Mr. Mason. Mr. Mason was our concluding speaker. Ms. Kurtz do you have a motion?

Board Member Sally Kurtz:

I move that the Board of Supervisors place the adoption of the Draft Solid Waste Management Plan as contained in Attachment 1 and revised by Attachment 2 on the agenda of the April 21, 2003, Board meeting for action.

Board Chairman Scott York:

All right. Discussion on the motion? I would like to. Excuse me, just let me ask I would the motion to be amended to send it to the Committee of the Whole. And again the difference is I would like to have an opportunity to work on it and it gives us more of an informal opportunity to do that.

Board Member Sally Kurtz:

Sir, I'll accept that as a friendly amendment.

Board Chairman Scott York:

Thank you. Mr. Herring?

Board Member Mark Herring:

I did not want to speak before the public comment came in, but I did have a question of the staff, which was whether there was any consideration given to harnessing the discharge of methane gas in the landfill and converting it to electricity. I don't need a whole lot of information now, but I have the name of someone who has information about how that might be able to be done depending on whether the volumes are now sufficient to do that. I didn't know if that was looked at all this time around.

OSWM Director Richard Weber:

Mr. Herring that has been looked at, and we do not have sufficient volume. In fact we can only run the landfill about half time, and then we have to let it recharge the rest of the week.

Board Member Mark Herring:

Ok. Thank you.

Board Member Charles Harris:

I have a procedural question.

Board Chairman Scott York:

Yes Mr. Harris.

Board Member Charles Harris:

Mr. Chairman is it your intent when we discuss this at a Committee of the Whole at the next business meeting, is it the intent then to take action following that?

Board Chairman Scott York:

Any motion coming out of the Committee as a Whole is appropriate. All right. Any other discussion? All right. Ms. Kurtz do you have any concluding words. Ok. All in favor to send this to the next business meeting to the Committee of the Whole work session signify by saying aye.

Board Members:

Aye.

Board Chairman Scott York:

Opposed? That motion will carry unanimously. Excuse me. 0-1 with Ms. Towe absent for the vote. All right.

Attachment 5. Responses to Questions from Board Members
Solid Waste Management Plan
Loudoun County Solid Waste Management Planning District
Board of Supervisors Action Item #8
Adoption of the Solid Waste Management Plan

The following questions have been forwarded to staff for comment. The question is in bold and the response is in regular text.

Questions from Chairman York:

- 1. The proposed reduction in the tipping fee goes against the Plan's intention of preserving the landfill because it will increase the volume.**

The Committee's recommendation is to balance the goals of revenue neutrality and conservation of disposal capacity. The level of capacity consumption does increase under the proposed reduction in the tipping fee. However, the impact of that increase is minimal in any reasonable public works/engineering strategic planning context. The planning horizon for most such projects and programs is 20 years. The State Solid Waste Planning Regulations has incorporated that planning horizon.

The estimated impact of the tipping fee reduction is to decrease the life of the facility capacity from 100 years to 65-80 years. This recommendation is still consistent with the conservation provision since the majority of MSW would still be leaving the County.

In the absence of any policy on conservation of disposal capacity, the County would likely take all MSW generated in the County, and the estimated life of the facility would be 35-39 years from present. Were the Committee's recommendation fully implemented that facility life would be extended by over 100% to 65-80 years from present. Due to changes in technology, rules, and public policy, most solid waste professionals would agree that capacity 60-100 years in the future is not a bankable asset. It is simply too far in the future to predict.

- 2. How do you intend to control the volume since the decreased tipping fee will increase volume?**

Contracts between the County and the haulers with set prices and limits on annual volumes will be used to achieve the desired volume targets. All haulers in the County will be afforded the opportunity to participate in the process. Similar mechanisms are used in other jurisdictions such as Fairfax County.

3. At the proposed increase of 145 tons per day, is the revenue sufficient to meet the goals of the County to break even and monitor the long-term environmental issues?

The Committee's recommendation anticipates Board direction to the County Administrator to implement a plan that balances the achievement of two goals, conservation of disposal capacity and revenue neutrality. If the County determines that the best balance of the these two goals can be achieved at the lowest authorized fee of \$47.00 per hauler ton, then sufficient revenue will be generated to cover all costs of disposal operations, construction of new disposal capacity, and closure of old disposal space. By 2016, this option would have generated \$10 M in revenues over costs that would more than offset the costs of opening the Woods Road Disposal Unit.

It is not specified which long-term environmental issues are at issue. The environmental monitoring and remediation of the old unlined landfill are not at issue. These costs are fixed since the County has to maintain and monitor the site for 30 or more years regardless of the amount of waste it accepts and the rate at which it accepts it.

4. Would the increased volume at the landfill require additional operating, capital equipment and staff expenditures?

Yes. There would be minor increases in equipment costs and 4 additional employees would be required. Construction of replacement capacity and closure construction project schedules would be accelerated slightly. These additional expenditures have been taken into account in the financial analysis.

5. Would it require an increase in hours and days?

The Committee recommendation is based on an assumption that the landfill would return to a six day per week operating schedule, but not necessarily an increase in operating hours per day. This increase in operating days has been accounted for in the cost analysis.

6. Is it your intention to grow the landfill as it is not consistent with the Solid Waste Management Plan?

The Committee recommendation for reduced tipping fees and revenue neutrality anticipates that the County Facility will continue as a minor player in the disposal market, and that the majority of MSW will continue to leave the County through the private transfer station for disposal in out-of-County landfills. Therefore, the Committee recommendation is not to increase the magnitude of the landfill and is consistent with the Solid Waste Management Plan. Since the Plan specifically recommends the reduction in hauler tipping fees to balance revenue neutrality and conservation of capacity, this recommendation is completely consistent with the Draft Plan as recommended by the Committee.

7. As an option, what are the fiscal implications of mothballing the landfill as compared to continuing to operate it at its present use and planned use? Has any analysis been done?

State Solid Waste Regulations require that closure construction commence within 180 calendar days of the last day of waste receipt. The current closure plan and construction plans anticipate a significantly different waste deposition configuration that currently exists. Therefore, any plan to close the facility early would translate into unplanned costs for plan amendments to consider closure plan revisions. Closure at this time would also waste a cell constructed and the public funds used for construction.

Replacement of the services at the landfill with a non-disposal facility and funding all first year costs of ceasing disposal operations would cost approximately \$5,650,000 in the first year. Annual operating costs to sustain replacement disposal services are estimated to be approximately \$1,900,000 over revenues. A detailed memo on this subject dated December 18, 2002, was prepared by staff for Ad Hoc Committee Chairman Kurtz. This memo has been previously distributed to the Board.

**County of Loudoun
Department of Planning**

MEMORANDUM

DATE: March 28, 2003
TO: Richard Weber, Director, Office of Solid Waste Management
FROM: Julie Pastor, Director of Planning
SUBJECT: Planning Department Review - Draft Solid Waste Management Plan

RECOMMENDATION

The March 17, 2003, Public Review Draft Solid Waste Management Plan (LCSWMP) conforms to the policies of the Revised General Plan.

OVERVIEW

The LCSWMP provides a detailed analysis of demand and capacity; offers clear direction in the areas of waste collection, disposal, recycling, education and monitoring; and provides an implementation program including funding for current and future needs. The Plan process included discussion within the community and stakeholders consistent with County planning practice.

The LCSWMP seeks to reduce waste creation by enhancing the County's recycling efforts through education, business partnerships and increased investment in recycling facilities and programs. This is consistent with the County's overall smart growth strategy. Waste collection and disposal remains predominantly a private sector endeavor supported by the Plan. Plan proposals seek to increase market competition and viability by reducing tipping fees at the County waste management facility. Public health and safety are supported through continued enforcement of design and operational standards at private facilities through the Zoning Ordinance and Chapter 1080 of the County Code.

POLICY REVIEW

The following review illustrates how the LCSWMP addresses the specific guidance provided by the Revised General Plan.

General Plan Strategy

4. Infrastructure

The community's infrastructure systems including water and wastewater, solid waste management, roads, energy and telecommunications must complement the land use strategy. Because the County does not completely control the provision of these vital infrastructure components, careful coordination is necessary. The Revised Countywide Transportation Plan, the Loudoun County Sewer and Water Master Plan and the Loudoun County Solid Waste Management Plan are documents which serve to reinforce and implement this strategy.

The Public Review Draft Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District is a revision to the Solid Waste Management Plan (SWMP) adopted by the Board in 1995. The Revised General Plan acknowledges the legitimacy of the SWMP as the County's service plan. The SWMP format and focus is mandated most by State Code requirements; however, the Plan does address key issues raised by policies of the Revised General Plan.

Revised General Plan Chapter Two, Planning Approach
(Revised General Plan, Pages 2-20 to 2-21)

C. Solid Waste Management

The Code of Virginia and the Virginia Solid Waste Management Regulations provide statutory and regulatory authority and responsibility to units of local government for planning solid waste services. Localities are to form solid waste planning districts and adopt and implement solid waste management plans (SWMP) which are to be reviewed and revised as needed and at least every five years. The Loudoun County Solid Waste Management Planning District (LCSWMPD) is comprised of the County and all incorporated towns except Leesburg, which is its own planning district.

With the adoption of the March 17, 2003 revised SWMP, the Town of Leesburg will be incorporated into the Loudoun Solid Waste Planning District. With this change the District will include all incorporated Towns and the County.

Solid-waste management is an essential service for residents and businesses in the county. These services are delivered through a public/ private partnership as outlined in the Loudoun County Solid Waste Management Plan (LCSWMP). The LCSWMP was developed in collaboration with the Solid Waste Citizens' Planning Committee in 1994-1995 and adopted by the Board of Supervisors in 1995. It is the plan of record for the most recent submittal to the Virginia Department of Environmental Quality.

The LCSWMP provides a needs assessment of solid waste management service requirements in the district and addresses how the district members intend to meet those needs. It includes substantial text and tables that describe both the waste generation and waste handling capacity of the public solid waste facilities and of private sector entities that provide solid waste management services in the County. The

LCSWMP also includes a capital facilities component. As such, while not entirely in the format of a County service plan, the LCSWMP functions as one.

The Loudoun County Solid Waste Management Facility is the County's solid-waste disposal facility. The County is currently constructing a \$2.3 million expansion to meet capacity demands through 2012. The County owns and operates recycling centers at the landfill and in the communities of Arcola, Hillsboro, Lovettsville, Lucketts, Middleburg, Philomont and Sterling Park. The Town of Leesburg owns and operates 3 sites within the town limits. An additional recycling center for western Loudoun is programmed in the current capital improvements planning period.

The Loudoun County Solid Waste Management Facility has a total capacity of 5.6 million cubic yards and can meet demands to 2021.

Solid Waste Management Policies (Revised General Plan, pages 2-21 to 2-22)

1. The County Solid Waste Management Plan will identify the type and level of service to be provided in the community.

The LCSWMP outlines a variety of disposal and recycling programs and the capacities and targets established for each. The three main areas include the County's disposal facility, recycling and material reuse, disaster waste management and environmental protection initiatives. The Waste Management System consists of the following topics:

- *Waste collection,*
- *Waste disposal, transfer and processing*
- *Waste diversion and recycling*
- *Public Education*

2. The County will continue to implement an integrated solid waste management strategy that places priority on reduction, reuse and recycling of solid waste above resource recovery, incineration and disposal into landfills.

The LCSWMP speaks extensively to waste diversion and recycling. The State requires that 25% of County waste be recycled. The County provides 8 recycling dropoff centers (DOC's), offers household hazardous waste (paints, fuels, insecticides..) and special waste (refrigerant, motor oil, antifreeze..) collection. Current figures report the County recycled 28% of its waste in 2001; down from 33% in 1998. This is the first decline measured since 1991. Municipal solid waste has declined substantially and the County relies on vegetative waste to meet the mandated recycling rate.

Initiatives proposed in the Plan to increase reuse and recycling include:

- *Exchange programs for paint and construction materials.*
- *Establishing a recycling DOC in Purcellville.*

- *Monthly hazardous household waste collection events.*
- *Waste oil disposal sites in populated areas.*
- *Consider a regional materials recovery facility*
- *Public education*

3. The County landfill will continue to exist to ensure that the County always has an acceptable alternative for local disposal of waste should other waste disposal alternatives fail or become ineffective.

Only 9% of landfilled material is disposed of at the Loudoun County Solid Waste Management Facility. Constructed capacity is sufficient to meet County needs until 2014 while approved capacity, including the Woods Road Solid Waste Management Facility has sufficient capacity to meet County needs for 52 additional years.

The SWMP recommends maintaining the County facility as a disposal option and protection against over reliance on outside disposal providers. The Plan calls for a revenue neutral fee structure for the facility and maintaining the Phase III construction plans for longterm capacity. No expansion of the current facility is proposed but a biannual assessment of available processing and disposal capacity is recommended.

4. The County will continue to seek private sector support for the provision of current and future Solid Waste Management Services. To this end, the County will define facilities and location and siting criteria for private facilities consistently in Section 1080 of the Codified Ordinance and the Zoning Ordinance.

The Plan speaks to reducing tipping fees as a means of encouraging competition in the waste collection market. The reduced fees are intended to spur private collection in rural areas and improve competition in the populated areas. The Plan also sets municipal solid waste disposal capacity at 125% of the disposal demand in the County. This number was evaluated and found to be sufficient until 2010.

The SWMP calls for continued enforcement of Chapter 1080 of the County Code to regulate public and private waste management facilities. Chapter 1080 supplements State and Federal regulations.

5. The County encourages the co-location of government facilities including recycling centers where feasible and they can function effectively.

Three recycling dropoff centers are located at school sites, others are located at the Philomont Fire Station, the George Center in Lovettsville, Mercer Park and the Arcola Community Center.

6. The County will develop a hazardous waste education program and increase residential access to the safe disposal of hazardous waste to protect groundwater resources.

The LCSWMP calls for increased Board funding to expand the household hazardous waste program to up to 12 events each year. The Plan calls for maintaining current collection programs for special wastes and business hazardous waste (CESQG) to expand oil and other special waste collection to regional sites in eastern and western Loudoun by fiscal year 2005.

Revised General Plan Chapter Three, General Public Facilities Policies

(Revised General Plan, pages 3-7 to 3-8)

1. The Board of Supervisors' Adopted Service Plans and Levels identify the type and level of service to be provided to the community. All public facilities will be developed in observance of these Plans and Levels.
2. The County will determine the need for new public facilities and will identify suitable sites based on the Revised General Plan, appropriate area plans, land-use and growth policies. The standards and levels of service for these public facilities are as prescribed in the Board of Supervisors' Adopted Service Plans and Levels.
3. The County recognizes the importance of civic buildings as gathering places and for establishing community identity. Because of their importance to the community, the County will set a positive example in terms of design and development of these facilities.
4. All public facilities will observe the location and design criteria as outlined in the comprehensive plan.
5. The County will consider the provision of suitable new public facilities, timely site dedications, upgrading existing facilities and operational assistance in order to mitigate the service impacts of a development proposal in making its decision to approve or deny the proposal.
6. The County will continue to seek private sector support for improvements or provision of current and future public facilities and sites.
7. The County will consider development community proposals of cash and in-kind assistance for public facilities in addition to the timely provision of dedicated sites.
8. The County encourages the co-location of County facilities where they are feasible and can function effectively as multi-purpose community facilities (e.g., community meeting space, shared parking, athletic fields, and integrated design).

The LCSWMP speaks to site location and public/private partnerships to provide facilities and collection services. Collocation of recycling centers with other County facilities has been accomplished. A new recycling center is proposed in the Purcellville area and the opportunity exists to likewise have it collocate with another public facility. The Plan addresses the timing of new or expanded facilities and programs. It includes a bi-annual examination of demand to determine when they will exceed current capacities.

CONCLUSION

Overall, the General Public Facilities Policies contained in the Revised General Plan have been addressed or can be accommodated by implementing the Solid Waste Management Plan (LCSWMP).

cc. Sarah Coyle, Division Manager of Community Planning

MEMORANDUM

TO: Loudoun County Board of Supervisors

FROM: Richard S. Weber, Director

THRU: Kirby M. Bowers, County Administrator

DATE: April 25, 2003

RE: Supplemental Documents Requested by Chairman York

During the discussion of the Draft Solid Waste Management Plan on April 21, 2003, Chairman York requested that staff provide historical documents relating to capacity estimates, projected landfill life, and cost of closing the facility/ceasing landfill operations. Staff has searched relevant reading files and has provided copies of a number of documents from 1992-1997 in the attached 3-ring binder. They have been copied on one side only to assist Board members in their review. A list of the documents included is found at the end of this memo. All documents are in chronological order.

While all known documents pertaining to the subject have been included, there are several key documents that are most relevant to the request made. The other documents provide a context for the discussions or conditions at the time of the document preparation. The four key documents are tabbed for the convenience of Board members and are listed as follows:

Policy / Legislative Committee Info Item. (Jul. 13, 1992). Report on Options for Future Solid Waste Disposal. *(Includes a table of cost comparisons between transferring trash and landfilling in Phase III for 20 months)*

Policy / Legislative Committee Info Item. (Mar. 10, 1994). Solid Waste Task Force: Fixed Costs of the County Solid Waste Management Facility Sites.

Board of Supervisors Action Item, Public Safety/Transportation Committee Report. (June 3, 1996). Solid Waste Management Options for Loudoun County.

Staff Memo to Chairman Kurtz, Ad Hoc SWMPC. (Dec. 18, 2002). Cost of Closing the Landfill Disposal Area.

In 1990, the County's solid waste engineering consultant noted in the final Landfill Site Selection Report that Site L (which became the Woods Road Solid Waste Management Facility [WRSMF]) had at least 20 years of capacity. However, this estimate was based on an assumed total facility disposal tonnage of 3,500,000 tons and was not based on

any engineering design. In 1994, the County's solid waste engineering consultant estimated the life of the Site L capacity of 21.8 million cubic yards (mcy) to be 45 years if the facility received essentially all Municipal Solid Waste (MSW) generated in the County for disposal.

The 1995 Solid Waste Management Plan indicates that there is at least 50 years of disposal capacity available in the County facility. This number was arrived at by using the medium to high flow scenario (medium representing the waste flow from all sources other than front or top loading trash trucks). That was the waste scenario in existence at the time the plan was formed.

These documents are largely vestiges of time. The variables of population, waste generation rate, recycling rate, compaction efficiency, permitted capacity, and percentage of waste to be handled by the County facility all are in play at all times in all documents. While all information was based on the best available information at the time of preparation, the most relevant, complete, and accurate information is that contained in the December 18, 2002 memo from staff to Ad Hoc Committee Chair Kurtz which is the document in the very back of the binder.

The current permitted capacity as of December 31, 2002, is 24,105,000 cubic yards (cy). This accrues from Phase IIA/B (105,000cy), Phase III (2,200,000cy), and WRSWMF (21,800,000cy). The design capacities of Phase III and WRSWMF have not changed since permits or permit amendments were issued for the respective capacity. The Phase IIA/B capacity did increase slightly as a result of the permit amendment for Phase III. Phase III was approved in 2001 and this capacity (2.2 mcy) was not a factor in prior Board discussions.

The available (constructed) capacity as of December 31, 2002 is 450,000cy which accrues from 105,000cy (Phase IIA/B), and 345,000cy (Cell IIIA). As has been indicated to the Board in prior discussions, the current permitted capacity (24,105,000cy) would likely last the County as follows:

- Approximately 100 years or more if the County SWMF is receiving waste for disposal **at the current level** escalated for population growth; or,
- Approximately 65-80 years if the County **implemented the proposed Landfill operating policy** included in the Draft LCSWMPD Plan; or,
- Approximately 35-39 years if the County SWMF were to **receive all waste** generated for disposal in the County.

These projected life spans are consistent with prior projections contained in the attached documents when the changes in the variables previously identified are taken into account.

Staff Contact: Richard S. Weber, Director, OSWM
03-04-387

Attached Documents:

1. Memo: Status of Site "L" Planning and Permitting	Mar. 3, 1992
2. Memo: Capital Improvement Projects Budget/Site "L" Funding	Mar. 5, 1992
3. BOS Action Item Amendment: Landfill Capacity - Emergency Procurement	Jun. 16, 1992
4. PLC: Landfill Issues	Jul. 13, 1992
5. PLC: Report on Options for Future Solid Waste Disposal	Jul. 13, 1992
6. PLC: Landfill Funding Authorized by Board	Jul. 20, 1992
7. BOS Info Item #12B: PLC Report/Landfill Information Items	Jul. 21, 1992
Memo: Finance Committee/Closure Plan, Landfill Phase II	Jul. 13, 1992
8. BOS Info Item #12C: PLC Report/Site "L" Issues	Jul. 21, 1992
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9. PLC: Status of Closure Issues	Sept. 21, 1992
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Letter: Loudoun County Landfill (Reduction in Retainage of Contract Amount)	Dec. 3, 1986
10. PLC: Reaffirmation of Waste Disposal Option for October 1993	Sept. 21, 1992
11. BOS Action Item #14A: PLC Report/ Reaffirmation of Waste Disposal Option for October 1993	Oct. 7, 1992
12. BOS Info Item Amendment: Alternative Solid Waste Options	Nov. 18, 1992
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13. Memo: Status of Phase IIB of the Loudoun Co. Landfill	Dec. 14, 1992
14. PLC: Designation of Future End Uses of the First Phase of the Woods Road (Site "L" Solid Waste Mgmt Facility)	Jan. 12, 1993
15. PLC Item #5: US EPA Implementation of Subtitle D Regulations	July 13, 1993
16. PLC Item #7: Loudoun Co. Waste Stream Report	Nov. 9, 1993
17. PLC: Solid Waste Task Force: Fixed Costs of the County Solid Waste Management Facility Sites	Mar. 10, 1994
18. Memo: WRSWMF Public Hearing on Draft Part B Permit, Part B – Executive Summary	July 22, 1994
19. Ernst & Young: Solid Waste Management Financial Feasibility Study – Draft Report	Oct. 25, 1994
20. PLC Info Item #5: Landfill Capacity Update	Sept. 12, 1995
21. BOS Action Item: Solid Waste Mgmt Options for Loudoun Co.	June 3, 1996
22. Memo: Cost of Closing the Landfill Disposal Area	Dec. 18, 2002

Date of Meeting: May 5, 2003

#5.

**BOARD OF SUPERVISORS
ACTION ITEM**

SUBJECT: Loudoun County Solid Waste Management Planning District
Revised Solid Waste Management Plan

ELECTION DISTRICT: Countywide

CRITICAL ACTION DATE: July 2004 (Legal Deadline)
July 2003 (Board Directed Deadline)

RECOMMENDATIONS:

Board: The Board conducted a Public Hearing on the draft plan, as amended by Attachment 2 on April 8, 2003, on behalf of the entire District. The Board discussed this matter at the regular business meeting on April 21, 2003. At that time, the only outstanding issue identified was the recommendation on the County Facility tipping fees. Chairman York requested supplemental documents for review and the Board forwarded the Plan as advertised (Attachment 1) and revised by Attachment 2 to the regular business meeting on May 5, 2003, for action. Attachment 3 is the draft resolution of approval.

Ad Hoc SWMP Committee: The Ad Hoc Solid Waste Management Planning Committee recommends that the Board of Supervisors and the Councils of the Towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill adopt the Draft Solid Waste Management Plan as submitted. Several minor revisions have been suggested since the work of the Committee was concluded. Draft motion #1 implements the Committee and staff recommendation.

Staff: Staff recommends that the Board of Supervisors approve the Draft Solid Waste Management Plan as contained in Attachment 1 and revised by Attachment 2 and authorize the Chairman to sign the resolution of approval on behalf of the Board.

BACKGROUND:

The Virginia Solid Waste Management Planning regulations, 9 VAC 20-130-10 *et seq.*, require the Loudoun County Solid Waste Management Planning District (LCSWMPD) to submit a revised solid waste management plan to the Virginia Department of Environmental Quality by July 2004. This plan must address the solid waste management needs of the entire District for a period of 20 years. The LCSWMPD includes the Towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill, as well as the unincorporated portions of the County.

ISSUES:

1. Response to Request for Supplemental Documents

At the discussion on April 21, Chairman York requested that staff provide supplemental documents relating to historical capacity projections and cost of discontinuing disposal operations at the County SWMF. These documents were provided to the Board on April 25, 2003 by separate memo. A copy of the transmittal memo which lists the subject documents is included as Attachment 4 (without documents).

2. Continuing Revisions for Public Process

Chapter 1, Chapter 9, and Appendix B of the Plan are subject to continuing revision to describe and include the components and results of the public process. Copies of Board items such as this item, and items presented to Town Councils will be added to Appendix B. Copies of Resolutions of Adoption will be included in Chapter 1. Additional text describing the steps in the process will be added to Chapter 9. Authorization to make these changes is included in Attachment 2 of this item and in the draft motion.

FISCAL IMPACT:

This plan is the service plan for the Office of Solid Waste Management. The fiscal impact of plan adoption and implementation was described in detail in the Public Hearing Item.

DRAFT MOTIONS:

1. I move that the Board of Supervisors adopt the Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District as contained in Attachment 1 and as revised by Attachment 2. I further move that the Chair be authorized to sign the Resolution of Approval (Attachment 3), and that staff be authorized and directed to submit the LCSWMP to the Virginia Department of Environmental Quality upon adoption by all District members and to follow up the Plan's approval and to make only editorial revisions necessary to insure consistency.

OR

2. I move an alternate motion.

ATTACHMENTS:

Attachment 1: Draft Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District (**Reminder to Board Members- please bring the copy of the plan provided to you for the March 17th meeting**)

Attachment 2: Proposed Modifications to the Public Review Draft

Attachment 3: Resolution of Approval

Attachment 4: Memo to Board of Supervisors Transmitting Requested Documents

STAFF CONTACT: Richard S. Weber, Director, OSWM

PUBLIC REVIEW DRAFT SOLID WASTE MANAGEMENT PLAN

FOR THE

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING DISTRICT

For the County of Loudoun
and the incorporated Towns of
Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg,
Purcellville, and Round Hill

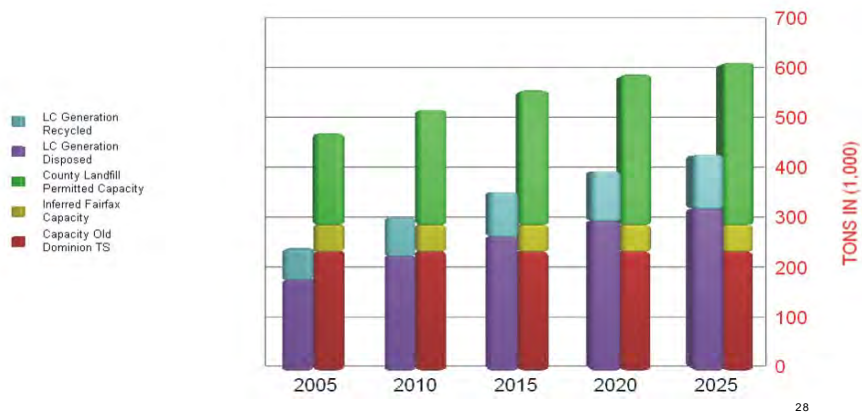
Editor's Note: Copies are of this Plan are available by calling the Office of Solid Waste Management at 703-777-0187 or by emailing oswm@loudoun.gov. This Plan can also be accessed on Loudoun County's website at www.loudoun.gov/oswm.

**Attachment 2. Proposed Modifications to the Public Review Draft
Solid Waste Management Plan
Loudoun County Solid Waste Management Planning District
Board of Supervisors Action Item #5
May 5, 2003**

1. Chapter 3, Figure 3-3

Replace the current Figure 3-3 for MSW with the following:

Loudoun County Solid Waste Management Plan
MSW System Capacity

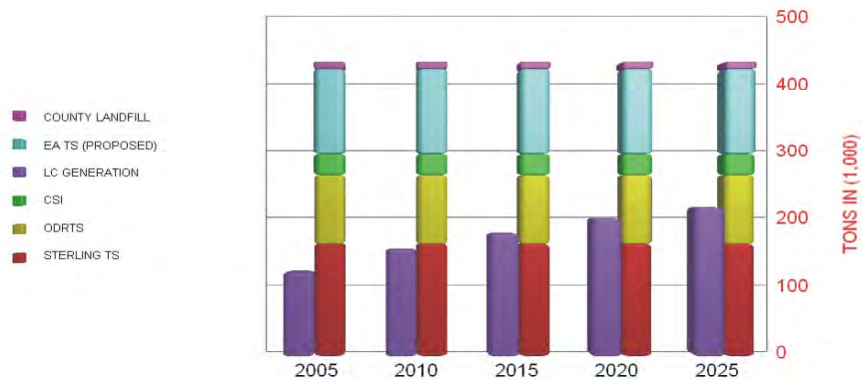


28

2. Chapter 3, Figure 3-4

Replace the current Figure 3-4 for C & D Waste with the following:

Loudoun County Solid Waste Management Plan
C&D Waste System Capacity

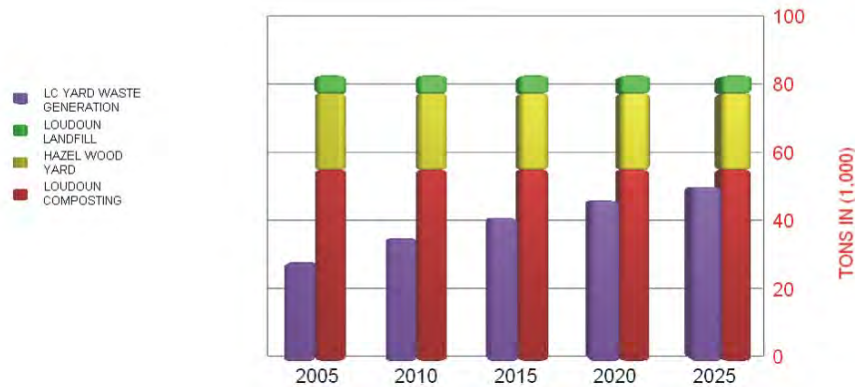


25

3. **Chapter 3, Figure 3-5**

Replace the current Figure 3-5 for Vegetative Waste with the following:

Loudoun County Solid Waste Management Plan
Vegetative Waste System Capacity



24

4. **Chapter 5.2 Bullet under Solid Waste Collection:**

Replace the existing bullet with The Towns may use contracted services or determine other means of collection at their discretion.

5. **Chapter 7.2.2, Objective B**

Add a sentence to the end of the existing sentence in paragraph one: The Towns may use contracted services or other means of providing for collection at their discretion. Add to the beginning of the existing sentence of paragraph four: When using contracted services to provide collection of solid waste and recycling, Towns will use contractual terms and conditions to ensure that minimum collection service levels are met in their jurisdictions.

6. **Revisions by Staff to Describe the Public Process:**

The Plan is not yet static but continues to add elements as it moves through the approval process. By approval of this attachment, governing bodies included in the District are authorizing OSWM staff to make revisions to Chapter 1, Chapter 9, and Appendix B as appropriate to describe the public process. These revisions include, but are not limited to Board items, Council items, Resolutions of Adoption, and general descriptions of the process.

7. **Authorization for Staff to Make Typographical Corrections:**

Staff is authorized to make editorial and typographical corrections to the Plan text to ensure consistency or clarity.

**Attachment 3. Resolution of Approval
Solid Waste Management Plan
Loudoun County Solid Waste Management Planning District
Board of Supervisors Action Item #5
May 5, 2003**

A RESOLUTION: That the County of Loudoun adopt the Solid Waste Management Plan dated March 17, 2003, as revised for and by the Public Hearing conducted on April 8, 2003, for The Loudoun County Solid Waste Management Planning District (LCSWMPD).

The Loudoun County Board of Supervisors, in a regular meeting on May 5, 2003, adopted the following:

WHEREAS, Loudoun County, the Town of Hamilton, the Town of Hillsboro, the Town of Leesburg, the Town of Lovettsville, the Town of Middleburg, the Town of Purcellville, and the Town of Round Hill are the local governments for the residents living within the boundaries of Loudoun County, and comprise the LCSWMP District and

WHEREAS, the Virginia Waste Management Board (hereinafter the State) has been authorized by State Code to promulgate and enforce such regulations as may be necessary to carry out its duties and powers and the intent of the Virginia Waste Management Act and related federal acts, and

WHEREAS, it is the policy of the State to require each city, county, and town to develop and maintain comprehensive and integrated solid waste management plans that, at a minimum, address all solid waste generated in the jurisdiction, and consider all components of the following hierarchy:

- Source Reduction
- Reuse
- Recycling
- Resource Recovery (Waste-to-Energy)
- Incineration
- Landfilling, and
- Plan Implementation, and

WHEREAS, the State has mandated that all localities sustain a recycling rate of 25%, and

WHEREAS, the State has required all local governments to update their Solid Waste Management Plans for current conditions and to address the solid waste management needs for the next 20 years, and

WHEREAS, all updated plans must be submitted to the Virginia Department of Environmental Quality by July, 1 2004,

NOW, THEREFORE BE IT RESOLVED, the Board of Supervisors does hereby authorize the Town of Leesburg to join and participate in the LCSWMPD, which currently includes the Towns of Hamilton, Hillsboro, Lovettsville, Middleburg, Purcellville, Round Hill , and the unincorporated portions of Loudoun County, with the same benefits and privileges as existing members, and requests that the other member jurisdictions likewise concur,

BE IT FURTHER RESOLVED, the Loudoun County Board of Supervisors does hereby adopt the Loudoun County Solid Waste Management Plan (presented at the April 8, 2003 Public Hearing, as revised),

BE IT FURTHER RESOLVED, the Board of Supervisors directs and authorizes the staff of the County Office of Solid Waste Management to submit the adopted Solid Waste Management Plan to the Virginia Department of Environmental Quality on behalf of the District.

Recorded Vote: _____

Moved by: _____

Seconded by: _____

Year: _____ Nays: _____ Abstain: _____

ATTEST:

Clerk of Board

Attachment 4. Staff Memo to the Board Transmitting Requested Documents
Solid Waste Management Plan
Loudoun County Solid Waste Management Planning District
Board of Supervisors Action Item #5
May 5, 2003

Loudoun County

Office of Solid Waste Management

MEMORANDUM

TO: Loudoun County Board of Supervisors

FROM: Richard S. Weber, Director

THRU: Kirby M. Bowers, County Administrator

DATE: April 25, 2003

RE: Supplemental Documents Requested by Chairman York

During the discussion of the Draft Solid Waste Management Plan on April 21, 2003, Chairman York requested that staff provide historical documents relating to capacity estimates, projected landfill life, and cost of closing the facility/ceasing landfill operations. Staff has searched relevant reading files and has provided copies of a number of documents from 1992-1997 in the attached 3-ring binder. They have been copied on one side only to assist Board members in their review. A list of the documents included is found at the end of this memo. All documents are in chronological order.

While all known documents pertaining to the subject have been included, there are several key documents that are most relevant to the request made. The other documents provide a context for the discussions or conditions at the time of the document preparation. The four key documents are tabbed for the convenience of Board members and are listed as follows:

Policy / Legislative Committee Info Item. (Jul. 13, 1992). Report on Options for Future Solid Waste Disposal. *(Includes a table of cost comparisons between transferring trash and landfilling in Phase III for 20 months)*

Policy / Legislative Committee Info Item. (Mar. 10, 1994). Solid Waste Task Force: Fixed Costs of the County Solid Waste Management Facility Sites.

Board of Supervisors Action Item, Public Safety/Transportation Committee Report. (June 3, 1996). Solid Waste Management Options for Loudoun County.

Staff Memo to Chairman Kurtz, Ad Hoc SWMPC. (Dec. 18, 2002). Cost of Closing the Landfill Disposal Area.

In 1990, the County's solid waste engineering consultant noted in the final Landfill Site Selection Report that Site L (which became the Woods Road Solid Waste Management Facility [WRSMF]) had at least 20 years of capacity. However, this estimate was based on an assumed

total facility disposal tonnage of 3,500,000 tons and was not based on any engineering design. In 1994, the County's solid waste engineering consultant estimated the life of the Site L capacity of 21.8 million cubic yards (mcy) to be 45 years if the facility received essentially all Municipal Solid Waste (MSW) generated in the County for disposal.

The 1995 Solid Waste Management Plan indicates that there is at least 50 years of disposal capacity available in the County facility. This number was arrived at by using the medium to high flow scenario (medium representing the waste flow from all sources other than front or top loading trash trucks). That was the waste scenario in existence at the time the plan was formed.

These documents are largely vestiges of time. The variables of population, waste generation rate, recycling rate, compaction efficiency, permitted capacity, and percentage of waste to be handled by the County facility all are in play at all times in all documents. While all information was based on the best available information at the time of preparation, the most relevant, complete, and accurate information is that contained in the December 18, 2002 memo from staff to Ad Hoc Committee Chair Kurtz which is the document in the very back of the binder.

The current permitted capacity as of December 31, 2002, is 24,105,000 cubic yards (cy). This accrues from Phase IIA/B (105,000cy), Phase III (2,200,000cy), and WRSWMF (21,800,000cy). The design capacities of Phase III and WRSWMF have not changed since permits or permit amendments were issued for the respective capacity. The Phase IIA/B capacity did increase slightly as a result of the permit amendment for Phase III. Phase III was approved in 2001 and this capacity (2.2 mcy) was not a factor in prior Board discussions.

The available (constructed) capacity as of December 31, 2002 is 450,000cy which accrues from 105,000cy (Phase IIA/B), and 345,000cy (Cell IIIA). As has been indicated to the Board in prior discussions, the current permitted capacity (24,105,000cy) would likely last the County as follows:

- Approximately 100 years or more if the County SWMF is receiving waste for disposal **at the current level** escalated for population growth; or,
- Approximately 65-80 years if the County **implemented the proposed Landfill operating policy** included in the Draft LCSWMPD Plan; or,
- Approximately 35-39 years if the County SWMF were to **receive all waste** generated for disposal in the County.

These projected life spans are consistent with prior projections contained in the attached documents when the changes in the variables previously identified are taken into account.

Staff Contact: Richard S. Weber, Director, OSWM

03-04-387

Attached Documents:

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4. PLC: Landfill Issues	Jul. 13, 1992
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Memo: Finance Committee/Closure Plan, Landfill Phase II	Jul. 13, 1992
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Memo: Status of Landfill Phases and Funding Summary	Sept. 18, 1992
9. PLC: Status of Closure Issues	Sept. 21, 1992
Letter: Loudoun Co. Landfill Intent to Close	Sept. 11, 1992
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21. BOS Action Item: Solid Waste Mgmt Options for Loudoun Co.	June 3, 1996
22. Memo: Cost of Closing the Landfill Disposal Area	Dec. 18, 2002

LOUDOUN COUNTY BOARD OF SUPERVISORS
MINUTES FROM THE MAY 5, 2003 BUSINESS MEETING
(FOR AGENDA ITEM #5 ONLY)

IN RE: LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING DISTRICT
REVISED SOLID WASTE MANAGEMENT PLAN

Supervisor Kurtz moved that the Board of Supervisors adopt the Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District as contained in Attachment 1 and as revised by Attachment 2. She further moved that the Chair be authorized to sign the Resolution of Approval (Attachment 3), and that staff be authorized and directed to submit the LCSWMP to the Virginia Department of Environmental Quality upon adoption by all District members and to follow up the Plan's approval and to make only editorial revisions necessary to insure consistency. Seconded by Supervisor Burton.

Supervisor Hiatt made a substitute motion that the Board of Supervisors defer the recommendation relating to tipping fees to further discuss this issue. Seconded by Supervisor Delgaudio.

Supervisor Hiatt discussed his conversation with Mr. John Lininger of JLL regarding the proposal to lower the County's tipping fee. He said that Mr. Lininger believed that this was not a good step for the County and explained how Frederick County had been negatively impacted when it lowered its tipping fee. He added that Mr. Lininger had agreed to make a presentation to the Board on this issue at no cost.

Supervisor Kurtz stated that the plan did not reduce the tipping fee, but charged the County Administrator to forward a study to maintain capacity and move toward revenue neutrality. She advised that balance should be achieved.

Chairman York explained why he would support Supervisor Hiatt's substitute motion and did not understand the need to rush on this issue.

Supervisor Hiatt explained that it would benefit the County to hear an independent view from Mr. Lininger. He referred to Supervisor Kurtz's previous comments in the March 21st Leesburg Today article.

Supervisor Hiatt's motion failed 3-6, Supervisors Hiatt, Delgaudio and York voted yes.

Supervisor Burton reminded Board members that if the population build-out would be cut in half, the landfill capacity would double.

Supervisor Kurtz corrected her previous comments. She said that it seemed there was intent to lock the County into the lowest fee and felt that this was still to be determined with the goal of more revenue neutrality.

Supervisor Harris stated the Board was interested in maintaining capacity in the landfill and not to give volume cheaply at the expense of the future of the County. He said that it was prudent to operate the landfill revenue neutral or revenue positive to help reduce the tax burden.

Supervisor Bogard expressed his support of the motion, but favored further information from Mr. Lininger. He said that he did not believe that the lowered tipping fee was the only factor that created the problem in Frederick County.

Supervisor Kurtz's motion passed 6-2-1, Supervisors Hiatt and Delgaudio voted no; Chairman York absent for the vote.

Vice Chairman Towe advised that many from the industry were involved in the discussion.



Loudoun County, Virginia

www.loudoun.gov

County Administration

1 Harrison Street, S.E., 5th Floor, P.O. Box 7000, Leesburg, VA 20177-7000

Telephone (703) 777-0200 • Fax (703) 777-0325

At a meeting of the Board of Supervisors of Loudoun County, Virginia, held in the County Administration Building, Board of Supervisors' Meeting Room, 1 Harrison St., S.E., Leesburg, Virginia, on Monday, May 5, 2003 at 9:00 a.m.

PRESENT: Scott K. York, Chairman
Eleanore C. Towe, Vice Chairman
William Bogard
James G. Burton
Eugene A. Delgaudio
Chuck Harris
Mark Herring
J. Drew Hiatt
Sally Kurtz

**IN RE: LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING
DISTRICT REVISED SOLID WASTE MANAGEMENT PLAN**

Ms. Kurtz moved that the Board of Supervisors adopt the Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District as contained in Attachment 1 and as revised by Attachment 2. She further moved that the Chair be authorized to sign the Resolution of Approval (Attachment 3), and that staff be authorized and directed to submit the LCSWMP to the Virginia Department of Environmental Quality upon adoption by all District members and to follow up the Plan's approval and to make only editorial revisions necessary to insure consistency.

Seconded by Mr. Burton.

Voting on the Motion: Supervisors Bogard, Burton, Harris, Herring, Kurtz, and Towe – Yes;
Supervisors Delgaudio and Hiatt – No; Chairman York – Absent for the Vote.

A COPY TESTE:

**DEPUTY CLERK FOR THE LOUDOUN
COUNTY BOARD OF SUPERVISORS**

DCR:05-05-03 bos resolution –h-solid waste management plan

STAFF REPORT

DATE: May 6, 2003

TO: Mayor and Town Council

FROM: Marty Kloeden, Assistant to the Town Manager

RE: Adoption of the Solid Waste Management Plan for Loudoun County

Background

Virginia Code directs the Virginia Waste Management Board (Board) to promulgate regulations specifying requirements for local and regional solid waste management plans. The Board has adopted revised solid waste management regulations that require all cities, counties and towns to submit a complete, revised solid waste management plan in compliance with their regulations to their department by July 1, 2004.

The Town of Purcellville and the other incorporated towns in Loudoun have joined with the County to form the Loudoun County Solid Waste Management Planning District. An Ad Hoc Solid Waste Management Planning Committee was established in September 2002 and charged with the creation of a new solid waste management plan with professional assistance from the County's Office of Solid Waste Management. The Committee met on numerous occasions to advance the new plan and also held a public input session that included many area residents and waste management industry representatives.

The Loudoun County Board of Supervisors adopted the revised Solid Waste Management Plan for Loudoun County on May 5, 2003. The Town members of the Loudoun Solid Waste Management Planning District will consider adoption of the plan during the next two months. Upon adoption by the District members, the plan will be submitted to the Virginia Department of Environmental Quality for review.

Discussion/Analysis

A draft of the proposed Solid Waste Management Plan dated March 17, 2003 (blue cover) has been distributed to all Town Council members for prior review (see attachment 1). As the representative from the Town of Purcellville, I acted to ensure that the future operations of our municipality in the area of solid waste management and recycling would not be constrained under the proposed plan. The staff of the County's Office of Solid Waste Management worked tirelessly to help the Committee craft a comprehensive document that addresses all statutory requirements and also the myriad of

waste management issues that confront a growing area. Attachment 2 reflects new language (underlined) that ensures that the town's solid waste collection alternatives are not constricted by the Plan. Attachment 3 is a Resolution of Approval that specifically allows the Town of Leesburg to join the Loudoun County Solid Waste Management Planning District, adopts the Loudoun County Solid Waste Management Plan (LCSWMP) and directs and authorizes the staff at the County's Office of Solid Waste Management to submit the LCSWMP to the state on behalf of the District.

Recommendation

Staff recommends that the Town Council approve the Loudoun County Solid Waste Management Plan for Loudoun County and further approves the updated language in attachment 2 and the further attached Resolution of Approval.

Motion

"I move that the Town Council adopt the Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District as contained in Attachment 1 and as revised by Attachment 2. I further move that the Mayor be authorized to sign the Resolution of Approval, and that County Office of Solid Waste Management staff be authorized and directed to submit the LCSWMP to the Virginia Department of Environmental Quality upon adoption by all District members and to follow up on the Plan's approval and to make only editorial revisions necessary to insure consistency."

Attachments

Attachment 1 : Draft Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District dated March 17, 2003 (blue cover).

Attachment 2: Proposed Modifications to the Public Review Draft

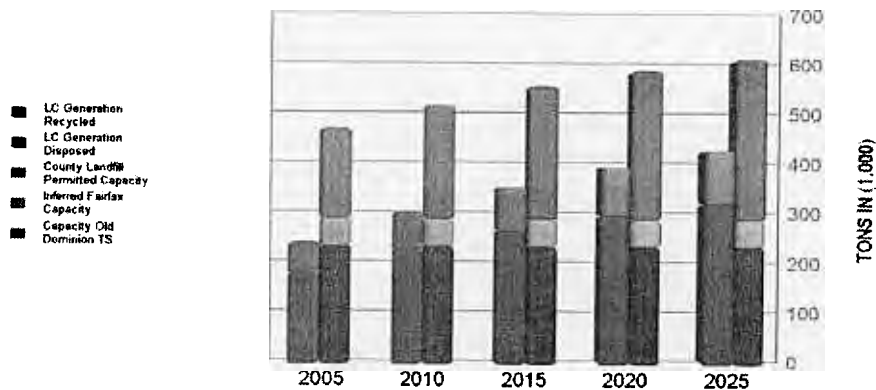
Attachment 3: Resolution of Approval

**Attachment 2. Proposed Modifications to the Public Review Draft
Solid Waste Management Plan
May 6, 2003**

1. Chapter 3, Figure 3-3

Replace the current Figure 3-3 for MSW with the following:

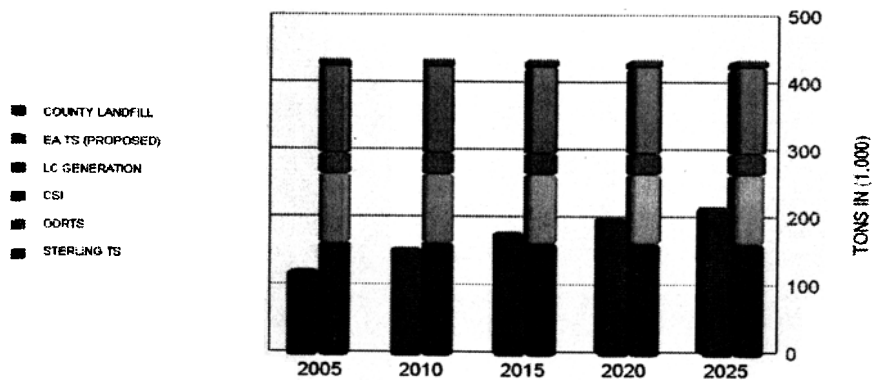
Loudoun County Solid Waste Management Plan
MSW System Capacity



2. Chapter 3, Figure 3-4

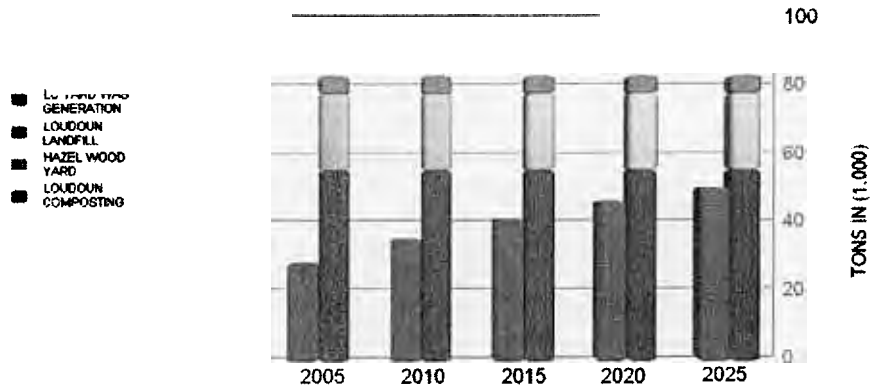
Replace the current Figure 3-4 for C & D Waste with the following:

Loudoun County Solid Waste Management Plan
C&D Waste System Capacity



3. Chapter 3, Figure 3-5

Loudoun County Solid Waste Management Plan
Vegetative Waste System Capacity



- Replace the current Figure 3-5 for Vegetative Waste with the following:
4. **Chapter 5.2 Bullet under Solid Waste Collection:**
Replace the existing bullet with The Towns may use contracted services or determine other means of collection at their discretion.
 5. **Chapter 7.2.2, Objective B**
Add a sentence to the end of the existing sentence in paragraph one: The Towns may use contracted services or other means of providing for collection at their discretion. Add to the beginning of the existing sentence of paragraph four: When using contracted services to provide collection of solid waste and recycling, Towns will use contractual terms and conditions to ensure that minimum collection service levels are met in their jurisdictions.
 6. **Revisions by Staff to Describe the Public Process:**
The Plan is not yet static but continues to add elements as it moves through the approval process. By approval of this attachment, governing bodies included in the District are authorizing OSWM staff to make revisions to Chapter 1, Chapter 9, and Appendix B as appropriate to describe the public process. These revisions include, but are not limited to Board items, Council items, Resolutions of Adoption, and general descriptions of the process.
 7. **Authorization for Staff to Make Typographical Corrections:**
Staff is authorized to make editorial and typographical corrections to the Plan text to ensure consistency or clarity.

**Attachment 3. Resolution of Approval
Solid Waste Management Plan
Loudoun County Solid Waste Management Planning District**

A RESOLUTION: That the Council of the Town of Purcellville adopt the Solid Waste Management Plan dated March 17, 2003, as revised for and by the Public Hearing conducted on April 8, 2003, for The Loudoun County Solid Waste Management Planning District (LCSWMPD).

The Council of the Town of Purcellville at a regular meeting on May 13, 2003, adopted the following:

WHEREAS, Loudoun County, the Town of Hamilton, the Town of Hillsboro, the Town of Leesburg, the Town of Lovettsville, the Town of Middleburg, the Town of Purcellville, and the Town of Round Hill are the local governments for the residents living within the boundaries of Loudoun County, and comprise the LCSWMP District and

WHEREAS, the Virginia Waste Management Board (hereinafter the State) has been authorized by State Code to promulgate and enforce such regulations as may be necessary to carry out its duties and powers and the intent of the Virginia Waste Management Act and related federal acts, and

WHEREAS, it is the policy of the State to require each city, county, and town to develop and maintain comprehensive and integrated solid waste management plans that, at a minimum, address all solid waste generated in the jurisdiction, and consider all components of the following hierarchy:

- Source Reduction
- Reuse
- Recycling
- Resource Recovery (Waste-to-Energy)
- Incineration
- Landfilling, and
- Plan Implementation, and

WHEREAS, the State has mandated that all localities sustain a recycling rate of 25%, and

WHEREAS, the State has required all local governments to update their Solid Waste Management Plans for current conditions and to address the solid waste management needs for the next 20 years, and

WHEREAS, all updated plans must be submitted to the Virginia Department of Environmental Quality by July, 1 2004,

NOW, THEREFORE BE IT RESOLVED, the Council of the Town of Purcellville does hereby authorize the Town of Leesburg to join and participate in the LCSWMPD, which currently includes the Towns of Hamilton, Hillsboro, Lovettsville, Middleburg, Purcellville, Round Hill , and the unincorporated portions of Loudoun County, with the same benefits and privileges as existing members, and requests that the other member jurisdictions likewise concur,

BE IT FURTHER RESOLVED, the Council of the Town of Purcellville does hereby adopt the Loudoun County Solid Waste Management Plan (presented at the April 8, 2003 Public Hearing, as revised),

BE IT FURTHER RESOLVED, the Council of the Town of Purcellville directs and authorizes the staff of the County Office of Solid Waste Management to submit the adopted Solid Waste Management Plan to the Virginia Department of Environmental Quality on behalf of the District.

Recorded Vote:

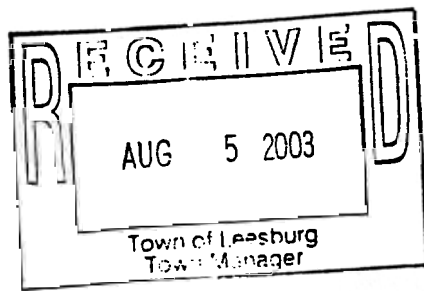
Moved by:

Seconded by:

Year: _____ Nays: _____ Abstain:

ATTEST:

Clerk of Council



C. Maynor/Council

The Town of Leesburg
INTEROFFICE MEMORANDUM
DEPARTMENT OF ENGINEERING & PUBLIC WORKS

TO: TOWN MANAGER DATE: AUGUST 5, 2003

FROM: DIRECTOR OF ENGINEERING RE: SOLID WASTE
AND PUBLIC WORKS MANAGEMENT PLAN

RECOMMENDATION: I recommend that the Town Council confirm the town's participation in the Loudoun County Solid Waste Management Planning District and adopt the Loudoun County Solid Waste Management Plan.

ISSUE: A Solid Waste Management Plan has been prepared by an Ad Hoc Solid Waste Management Planning Committee for the Loudoun County Solid Waste Management Planning District (LCSWMPD). A Public Hearing was held by the Loudoun County Board of Supervisors on April 8, 2003 and the plan was adopted by the County on May 5, 2003. The Planning District includes the incorporated Towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville and Round Hill, as well as the unincorporated portions of Loudoun County. Each member of the Planning District must adopt the Plan and authorize submission of the adopted Plan to the Virginia Department of Environmental Quality (DEQ).

BACKGROUND:

Why a Plan Is Needed

The District's current Solid Waste Management Plan was adopted in 1995 and the town's current Plan was approved in 1992. Virginia Solid Waste Management Planning Regulations require all local governing bodies to revise and adopt Solid Waste Management Plans by July 1, 2004. The Regulations require the preparation of a comprehensive plan that addresses how the District will manage all non-hazardous solid waste generated in the District for the next 20 years.

Leesburg needs to revise and update its current Plan and has joined with the County and other towns as part of the LCSWMPD. A request to join the Planning District was made and approved by the Virginia DEQ. Participation with the LCSWMPA will not limit the authority of the town to continue to operate refuse and recycling collection programs independently of the County.

On July 1, 2002, the Board of Supervisors established an Ad Hoc Solid Waste Management Planning Committee to review and revise or replace the existing Plan in accordance with State regulations and with current and projected solid waste generation data. The seven member Towns of the District joined in this effort by appointing a representative to the Ad Hoc

RE: SOLID WASTE
 MANAGEMENT PLAN

The Ad Hoc Committee began meeting in September 2002. The process to develop the Solid Waste Master Plan included numerous work sessions and a public information and input session. The goals for the Plan are as follows:

- To provide and maintain viable solid waste management options to assure adequate waste disposal for Loudoun County.
- To implement and maintain programs for ensuring that nonhazardous solid wastes are managed in accordance with state laws and regulations.
- To ensure that all solid wastes are managed in a manner that protects public health and the environment.
- To maintain a program for management of solid waste that is technologically, economically, and socially acceptable to the citizens of Loudoun County and to the Commonwealth of Virginia.
- To develop a system that ensures provision of adequate and affordable management of solid waste to Loudoun County residents, businesses and institutions and to address the responsible party(ies); objective milestones and deadlines; expected benefits and outcomes and; funding sources.
- To continue pursuit of alternatives to waste disposal including waste minimization and source reduction, reuse, recycling, or combinations of these technologies.
- To develop and implement a countywide program that will achieve or exceed the State's 25 percent mandatory recycling rate.
- To develop a public outreach and education program to educate citizens and businesses about issues in solid waste management and acceptable waste management practices.
- To maintain active liaison and communications with the waste management industry, and Federal, State, and local government officials concerns with solid waste.

On February 12, 2003, the Ad Hoc Solid Waste Management Planning Committee approved and recommended the revised Solid Waste Management Plan to the Board of Supervisors, and to the Councils of the member Towns for their consideration and adoption. The Executive Summary from the Loudoun County Solid Waste Management Plan is attached (Attachment A).

RE: SOLID WASTE
MANAGEMENT PLAN

Public Hearing

A final draft of the Plan was completed in February 2003. A Public Hearing was held by the Loudoun County Board of Supervisors on behalf of the LCSWMPD on Tuesday, April 18, 2003. A copy of the public hearing announcement is attached as Attachment B.

Major new initiatives in the plan include:

- Creating a public/private partnership to construct and operate a recycling depot at the Loudoun County Solid Waste Management Facility (Landfill) to increase recycling opportunities for collectors;
- A revised landfill pricing structure requiring less local tax funding for solid waste management facility operations and capital construction and fostering competition among independent collectors;
- Increasing the availability of waste oil and other special waste collection services and the number of household hazardous waste collection events by the county;
- Restoring a recycling drop-center to the Purcellville area; and
- Increasing regulatory oversight for management of waste dirt and the burning of solid waste.

The Board of Supervisors approved the Solid Waste Management Plan for the LCSWMPD in their business meeting on Monday, May 5, 2003. A copy of this Plan is included as Attachment D.

Review by Environmental Advisory Commission (EAC)

The Leesburg EAC was presented the draft Solid Waste Master Plan. After review and discussion the EAC adopted a motion on June 18, 2003 recommending adoption of the Plan by the Leesburg Town Council. The motion is attached as Attachment C.

Adoption of the Plan by Leesburg

The Town of Leesburg must adopt and submit a complete revised Solid Waste Management Plan in compliance with state regulations no later than July 1, 2004. Preparation of this plan has been accomplished by participation in the LCSWMPD and working with the County and other towns to complete a plan for the entire planning district. This Plan works well for the County and the towns. The County Solid Waste Management staff provides assistance to the towns in areas of landfill management, household hazardous waste disposal and reporting to the state DEQ. The towns will continue to operate and manage independent refuse and recycling collection and disposal contracts.

RE: SOLID WASTE
 MANAGEMENT PLAN

I therefore recommend that the Town Council reaffirm participation in the LCSWMPD, adopt the Solid Waste Management Plan and authorize and direct the staff of the County Office of Solid Waste Management to submit the adopted Plan to the Virginia Department of Environmental Quality on behalf of the District.

A handwritten signature in cursive script, reading "Thomas A. Mason", is positioned above a horizontal line.

Thomas A. Mason, P.E.

Attachments:

- (A) - Executive Summary Loudoun County Solid Waste Management Plan
- (B) - Loudoun County Board of Supervisors April 8, 2003 Public Hearing
- (C) - Leesburg Environmental Advisory June 18, 2003 Meeting Motion
- (D) - Public Review Draft Solid Waste Management Plan for LCSWMPD

ATTACHMENT A

NOTE: The Executive Summary can be found on page iii of the Solid Waste Management Plan and is not duplicated here.

ATTACHMENT B

NOTE: The Loudoun County Board of Supervisors April 8, 2003 Public Hearing can be found earlier in Appendix B and is not duplicated here.

ATTACHMENT C

Leesburg Environmental Advisory Commission
June 18, 2003 Meeting

**Agenda Item 6 – Loudoun County Solid Waste Management Plan EAC
Recommendation**

Motion: The EAC recommends the Town Council adopt the Solid Waste Management Plan Dated March 17, 2003, as revised for and by the Public Hearing conducted on April 8, 2003, for The Loudoun County Solid Waste Management Planning District (LCSWMPD).

Motion: Commissioner Bingol
Second: John Elgin
Carried: 5-0-2

ATTACHMENT D

(Copies available from Department of Engineering & Public Works)

APPENDIX C
SOLID WASTE MANAGEMENT PLANNING COMMITTEE
AGENDAS AND AGENDA ITEMS

This appendix provides a copy of the agenda and agenda items for each meeting of the Ad Hoc Solid Waste Management Planning Committee. Meeting Summary items are provided in **Appendix D** and are not duplicated in this Appendix.

Document	# of Pages
1. Agenda for September 11, 2002 (no Items)	1
2. Agenda and Items for September 25, 2002	30
3. Agenda and Items for October 9, 2002	11
4. Agenda and Items for October 23, 2002	28
5. Agenda and Items for November 20, 2002	34
6. Agenda and Items for January 8, 2003	19
7. Agenda and Items for January 22, 2003	13
8. Agenda and Items for February 12, 2003	15

APPENDIX C
SOLID WASTE MANAGEMENT PLANNING COMMITTEE
AGENDAS AND AGENDA ITEMS

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AGENDA
Loudoun County
Ad Hoc Solid Waste Management Planning Committee
Wednesday, September 11, 2002

5:30 pm - Board Room

- 5:30 Welcome and Introduction Sally Kurtz, Supervisor, Catoctin District
Chair, Ad Hoc SWMP Committee**
- 5:35 Purpose, Process and Schedule, and Plan Requirements**
- 5:45 Staff Presentation – Trash: Who makes it, What are they making and
How Much are they making?**
- 6:30 Break**
- 6:35 Staff Presentation – Trash: Where does it go and who takes it?**
- 6:50 Questions & Answers
Next Meeting**
- 7:00 Adjourn**

AGENDA
County of Loudoun County
Ad Hoc SWMP Committee
Wednesday, September 25, 2002
6:00 PM

1. Welcome and Introductions- Supervisor Kurtz, Chair
2. Follow-up to September 11th meeting-questions/issues
3. Staff Presentation of the first half of Draft Chapter 7: The Existing Solid Waste Financial System
 - A. Private Collection
 - B. Public Collection
 - C. Private Facilities
 - D. Public Facilities
 1. Landfill Debt Service
 2. WRSWMF Debt Service
 3. Landfill Revenues
 - E. County Programs
 - F. Town Programs
 - G. Non-Government Programs
4. Options for Future Funding Solid Waste Programs
 - A. General fund
 - B. Enterprise fund
 - C. Service district fees

Questions

Break

5. Staff presentation of Solid Waste System Issues and Options
 - A. Recycling Issues
 1. How Will the Loudoun County Solid Waste Management Planning District (LCSWMPD) Maintain Compliance with the Existing 25% Recycling Rate?
 2. How will the Board address the Deficit in the Recycling DOC policy implementation to insure that convenient and equitable recycling opportunities will be maintained for the residential and business community?
 3. Does the District Wish to Proactively Address Future Increases in the Recycling Rate?
 4. Does the District Wish to Set a Higher Recycling Goal (Higher Environmental Standard) for County Residents?

- B. Solid Waste Management System Deficits
 - 1. Should the LCSWMPD Take Regulatory Actions that Would Establish a More Level Playing Field and Stimulate Competition among Solid Waste Service Providers?
 - 2. How Will the Board Ensure that Adequate Facilities Exist to Support Recently Enacted Yard Waste Recycling Requirements?
 - 3. How Will the Board Assess the Available Capacity of the Current Solid Waste Management System (Facilities) to Handle all Generated Waste?
 - 4. What Are Some Waste Reuse and Exchange Options to be pursued by the District?
 - 5. What Are Some Options for Ensuring Solid Waste Collection Services in Rural Areas?
 - 6. What is the District's Status in Regional Construction Waste Disposal Issues?

- C. Emergent Trends
 - 1. Should Consistency Between the Zoning Ordinance and the Solid Waste Ordinances with Regard to Solid Waste Related Matters Be a Priority?
 - 2. What Are Some Options for Handling Increasing Types and Amounts of Special Wastes?
 - 3. What Can the LCSWMPD Do to Ensure an Adequate Response to Solid Waste/Debris Disasters?
 - 4. Does the Board Want to Regulate Unauthorized Dumping of Waste Dirt and/or the Accumulation of Waste Dirt in Large Surface Piles by Businesses that Accept Dirt for a Fee?
 - 5. Does the Board Want to Prohibit Burning of Solid Waste by Residents?
 - 6. How Will the District Ensure that the SWMP is implemented and updated in a Dynamic Solid Waste Environment?
 - 7. What Opportunities Exist for the County and the Seven Incorporated Towns to Partner to Achieve and Sustain Effective Solid Waste Management?

**Ad Hoc Solid Waste Management Planning Committee
Item 2: Follow-Up to September 11, 2002 Meeting**

Background:

Chairman Kurtz has requested that questions and issues from prior meetings be specifically addressed at the following meeting. The purpose of this item is to identify any such issues or questions, and provide a response or indicate where the response is included in the scheduled presentation. This item will also be used to transmit the meeting summaries from the previous meeting. Two items have been forwarded for discussion. They are a letter from River Creek Owners Association, and a letter from Keith Reasoner, Mayor, Town of Hamilton.

Meeting Summary from September 11, 2002

The meeting summary from the initial meeting of the Ad Hoc SWMPC is included as **Attachment 1**. Please provide any revisions in writing to Leslie Hansbarger.

River Creek Owners Association Letter

At the meeting on September 11, Chairman Kurtz announced that she had received a letter from River Creek Owners Association regarding an apparent lack of facility capacity in the County that was negatively effecting trash collection service delivery and service costs. A copy of the letter is included as **Attachment 2**. Staff has reviewed the letter and had a follow-up conversation with the author of the letter. Staff has also checked records submitted by the local private transfer station and confirmed the findings that there have not been capacity related shutdowns at the facility for over a year. The issues raised may be the result of any one of, or combination of the following factors:

1. The operators of the Transfer Station do not contract for a sufficient number of long-haul trucks to maintain outflow of trash and thus avoid backup problems.
2. Timing of delivery of waste by haulers to the facility (queuing), maybe after the facility closes or stops receiving trucks for the day.
3. Discriminatory practices taken by the facility against non-Waste Management trucks.
4. Hauler has a preference for Fairfax facility.
5. Hauler chooses not to use Loudoun SWMF because rates are too high.
6. Hauler runs route too late in the day to use disposal facilities after collection.

It is unclear which of these factors are at play in this matter. Most of the factors have to do with business decisions exercised solely by one party even though they may affect others. The issue of the Board establishing a more competitive environment is addressed in Item 5B.

Mayor Reasoner's Concrete Recycling Letter

The Honorable Keith Reasoner, Mayor of the Town of Hamilton, has forwarded a letter to Chairman Kurtz (**Attachment 3**) regarding recycling of concrete. The amount of concrete that is recycled in the County is one of the information gaps (addressed in Emergent Issues and Trends Issue #6). We do know that a lot of concrete is not recycled. The District may wish to consider some effort to increase the level of concrete recycling as discussed in Issue Recycling Issue #3.

Attachment 1:	Meeting Summary dated September 11, 2002, Ad Hoc SWMPC
Attachment 2:	Letter dated September 4, 2002 from Jerry Strasbaugh, Manager, River Creek Owners Association
Attachment 3:	Letter dated September 13, 2002 from Keith Reasoner, Mayor, Town of Hamilton

Attachment 1
Meeting Summary dated September 11, 2002
Included in Appendix D

River Creek Owners Association

c/o Pinnacle L.C.

Ad Hoc SWMP Committee, Item 2
Attachment 2, Page 1 of 1
September 25, 2002

September 4, 2002

Sally Kurtz
1 Harrison Street, S.E.
5th Floor
P.O. Box 7000
Leesburg, VA 20177-7000



Dear Ms. Kurtz:

As the manager for the River Creek Owners Association, we have found that the cost of providing refuse service for the Association is considerably higher than for similar communities that we manage in other areas. The lack of capacity at a local refuse transfer station is a part of that problem. Many times drivers are forced to take their loads to Fairfax's facility when the local station's daily quota has been reached.

We provide twice weekly refuse collection along with weekly recycling. Other similar communities in a rapidly growing area are doing the same. I believe that the County should be looking at zoning and constructing a regional facility to coordinate this service. Absent a public facility, there should be a sufficient amount of zoned property for adequate private sector firms to provide for collection and transfer or solid waste.

Sincerely,

Jerry Strasbaugh

TOWN OF HAMILTON

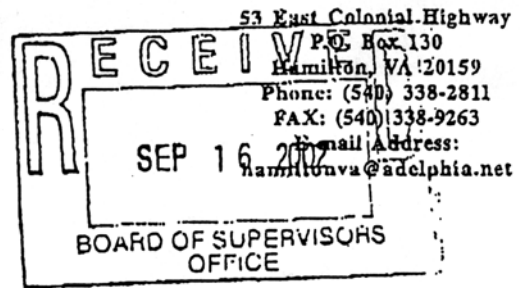
Ad Hoc SWMP Committee, Item 2
Attachment 3, Page 2 of 3
September 25, 2002

Mayor
Keith Reasoner



September 13, 2002

Town Recorder
Marjorie C. Locke



Supervisor Sally Kurtz
Chair, Ad Hoc SWMP Committee
LC Board of Supervisors
1 Harrison Street, SE - 5th Floor
P O Box 7000
Leesburg, VA 20177-7000

Dear Sally:

I was thoroughly impressed by the presentation provided by the Solid Waste Management Plan Committee on September 11, 2002, and the OSWM staff. This dedicated and professional staff did an excellent job on the presentation, which I am sure entailed many laborious hours to accommodate all the data presented.

I note construction demolition debris is a significant contributor to solid waste disposal. Possibly this is an area where recycling may be beneficial in reducing this waste. I am aware there are concrete and asphalt recycling facilities in our area. Recently in the renovation/addition project at Catoctin Elementary School recycled concrete was used as a sub-base for a roadway replacing 21A/57 stone gravel. At the time a comment was made that this was less expensive than stone gravel. As far as I know, this roadway base has not deteriorated in several years. It is my understanding VDOT has approved some form of recycled asphalt for roadway resurfacing.

How much of this recycled material can be used in construction is difficult to quantify. However, it would appear to me if engineers, architects, contractors, and owners could be encouraged to use this material in their design specifications it would significantly reduce the waste tonnage of ECD.

I apologize for not contributing more to this vital county service committee.
Please let me know if I can be of any service to you and the committee. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Keith Reasoner", with a stylized flourish at the end.

Keith Reasoner
Mayor

Cc: Eleanore Towe

Ad Hoc Solid Waste Management Planning Committee
Items 3 and 4: Staff Presentation of Draft Chapter 7 of the Solid Waste Management Plan

Background:

On September 11, 2002, Staff presented a draft of Chapters 1-4 of the Solid Waste Management Plan (SWMP) document. These chapters describe the solid waste management system in Loudoun County. Staff has prepared a draft of Chapter 7 of the SWMP for the September 25 meeting. This chapter addresses financing and funding of the solid waste management system. Unlike Chapters 1-4, the final version of Chapter 7 will contain not only a description of the current financing system but also plans for future elements of the solid waste management system and how the District members plan to fund existing elements in the future. For this reason and for the sake of clarity, the presentation has been divided into two agenda items.

Agenda Item 3:

Revised Table of Contents

Attachment 1 is a revised Table of Contents (TOC) for the draft SWMP that reflects the addition of Chapter 7. In the packet distributed for the September 11, 2002, meeting, a TOC was included. This TOC is no longer current. Please discard any copies of the first TOC (dated 09/11/2002 in the footer of each page) and replace them with the attached TOC (dated 09/20/2002 in the footer of each page).

Chapter 7: Funding the Solid Waste Management System, Sections 7.0 - 7.7

Attachment 2 is a draft of Chapter 7 text. Item 3 of the agenda highlights Sections 7.0 - 7.7 (page 7-1 to top of page 7-15). These sections address current financing and funding for collection, facilities, and programs from the private sector, the Towns, Non-governmental agencies, and the County.

Agenda Item 4:

Chapter 7: Funding the Solid Waste Management System, Sections 7.8 - 7.15

Attachment 2 also includes Sections 7.8 - 7.15 of the draft Chapter 7. These sections relate to the financing and funding of future elements of the solid waste management system in Loudoun County. Staff was able to prepare information for parts of these sections, based on current plans, capacities, and legal restrictions. Staff will only be presenting background information on options for future methods of funding on September 25. The remainder of these sections--and any other added sections--will result from the work of the Ad Hoc SWMP Committee.

Attachment 1: Revised Table of Contents for the SWMP Document

Attachment 2: Draft of Chapter 7 of the SWMP Document, "Funding the Solid Waste Management System."

**Ad Hoc Solid Waste Management Planning Committee
Item 5: Staff Presentation of Solid Waste System Issues and
Options for Consideration by the Ad Hoc Committee**

Background:

The purpose of this item is to present to the Ad Hoc SWMP Committee a series of issues with the current and future solid waste management system. These issues have been identified in earlier materials distributed to the Ad Hoc Committee. There are three general topics, previously identified by Chairman Kurtz: Recycling Issues, Solid Waste Management System Deficits, and Emergent Trends in solid waste. Within each topic are several issues. In the attachment, staff has prepared for each issue a discussion of the issue and presented several options for the Ad Hoc Committee to consider.

Recycling Issues

Attachment 1 describes recycling issues with the current solid waste management system and presents several options for consideration.

1. How will LCSWMPD Maintain Compliance with the Existing 25% Recycling Rate?
2. How will the Board of Supervisors address the Deficit in the Recycling DOC Policy to insure that convenient and equitable recycling opportunities will be maintained for the residential and business communities?
3. Does the District Wish to Proactively Address Future Increases in the Recycling Rate?
4. Does the District Wish to Set a Higher Recycling Goal (Higher Environmental Standard) for County Residents?

Solid Waste Management System Deficits

Attachment 2 describes deficits in the current solid waste management system and presents several options for consideration.

1. Should the LCSWMPD Take Regulatory Actions that Would Establish a More Level Playing Field and Stimulate Competition among Solid Waste Service Providers?
2. How Will the Board Ensure that Adequate Facilities Exist in the Immediate Timeframe to Support Efforts by Residents and Businesses to Comply with Recently Adopted Solid Waste Collection, Transportation, and Recycling Code Amendments?
3. How Will the Board Assess the Available Capacity of the Current Solid Waste Management System (Facilities) to Handle all Generated Waste?
4. What Are Some Waste Exchange & Reuse options to be pursued by the District?
5. What Are Some Options for Ensuring Solid Waste Collection Services in Rural Areas?
6. What is the District's Status in Regional Construction Waste Disposal Issues?

Emergent Trends

Attachment 3 describes emergent trends in the current solid waste management system and presents several options for consideration.

1. Should Consistency Between the Zoning Ordinance and the Solid Waste Ordinances with Regard to Solid Waste Related Matters Be a Priority?
2. What Are Some Options for Handling Increasing Types and Amounts of Special Wastes?
3. What Can the LCSWMPD Do to Ensure an Adequate Response to Solid Waste/Debris Disasters?
4. Does the County Want to Regulate Unauthorized Dumping of Waste Dirt and/or the Accumulation of Waste Dirt in Large Surface Piles by Businesses that Accept Dirt for a Fee?
5. Does the Board Want to Prohibit Burning of Solid Waste by Residents?
6. What are some Information Deficits in the Solid Waste Management System?
7. What Opportunities Exist for the County and the Seven Incorporated Towns to Partner to Achieve and Sustain Effective Solid Waste Management?

Attachment 1:	Recycling Issues
Attachment 2:	Solid Waste Management System Deficits
Attachment 3:	Emergent Trends

RECYCLING ISSUE #1

How Will the Loudoun County Solid Waste Management Planning District (LCSWMPD) Maintain Compliance with the Existing 25% Recycling Rate?
--

BACKGROUND:

Loudoun County submitted a recycling rate of 28% for 2001 including yard waste, arboreal waste, and construction/demolition/debris (CDD). As demonstrated in the September 11, 2002 presentation to the Ad Hoc Committee, recycling rates are declining in Loudoun County (see SWMP Chapter 3, page 28, Figure 3-6). The Board of Supervisors has recently addressed this issue by adopting code amendments to Chapters 1084 and 1086, which increase the level of required recycling effort for Loudoun County businesses and residents, prohibit disposal of recyclables by haulers, and improve reporting of recyclable materials collected. While the amendments are certain to increase the level of recycling, documented results will require several years to acquire due to a staggered implementation schedule. The ordinances expressly exempt areas within the incorporated towns from the provisions of the ordinances unless a town formally adopts the ordinances.

OPTIONS:

- 1) Do nothing further until results of code amendments are known.
- 2) Town members of the LCSWMPD could adopt Chapters 1084 and 1086.

In this option, although it would likely impact the town's trash service contract costs, co-adoption by the towns would help the District as a whole achieve and maintain its required recycling rates. Coordinated efforts would allow residents and businesses to receive better education and consistent messages about the need to recycle, as well as the procedures to do so.

RECYCLING ISSUE #2

How will the Board Address the Deficit in the Recycling DOC Policy Implementation to Insure that Convenient and Equitable Recycling Opportunities will be Maintained for the Residential and Business Communities?

BACKGROUND:

The Board of Supervisors adopted a recycling policy in 1992 and affirmed the policy in 2001 (see Chapter 3, Section 3.3.2.1). The policy defines adequate recycling infrastructure according to **distance** with one Recycling Dropoff Center (DOC) within 5 miles of every resident and **density** with one DOC for every 10,000 population. The Recycling DOC deficit has actually increased as there are fewer DOCs in place than there were in 1992.

There is an immediate pressing need for a regional DOC in Purcellville and business support DOCs in Ashburn and South Riding to support recently adopted code amendments.

OPTIONS:

- 1) Funding additional DOC sites is not a current priority due to budget constraints.
- 2) Develop a capital improvement and funding schedule to construct and operate DOCs for immediate needs in the Purcellville area to replace three sites lost in 1995 and in the Ashburn and South Riding areas.
- 3) Develop a capital improvement and funding schedule to implement fully the County's current recycling policy.
- 4) Develop a Recycling Dropoff Center plan for co-locating DOCs in a comprehensive Countywide joint-use public facility plan for parks, schools, fire stations and other capital projects.

RECYCLING ISSUE #3

Does the District Wish to Address Proactively Future Increases in the Recycling Rate (RR)?

BACKGROUND:

The Virginia General Assembly introduced legislation to increase the RR to 35% in the 2001 session. The EPA is considering increasing the national recycling rate to 35% by 2005. Increasing local efforts before the requirements are promulgated will afford the District members more time to address or implement changes to achieve compliance.

OPTIONS:

- 1) Take no action at this time and wait for an increase to be announced.
- 2) Refer the issue to a committee for formal study.

In this option, specific decisions on this issue could be deferred until after the solid waste management plan process is complete. A study/work group could be appointed to assess options and provide recommendations for consideration by the District membership within 18 months.

- 3) Increase the current level of recycling program effort to achieve higher rates:
 - a) Increase existing recycling outreach programs for residents and businesses to raise awareness and provide guidance on recycling opportunities.
 - b) Increase special waste collection events and types of materials collected, such as the new electronics collections.
 - c) Consider recycling initiatives to increase recycling of construction wastes including pallets, asphalt, concrete, and wood.

RECYCLING ISSUE #4

Does the District Wish to Set a Higher Recycling Goal (Higher Environmental Standard) for District Residents and Businesses?
--

BACKGROUND:

In the past, the Board of Supervisors has discussed establishing a recycling policy or standard for Loudoun County residents based on counting MSW and Construction waste only. Yard waste and/or arboreal waste would not be considered part of the recycling rate calculations. The District's recycling rate for CY2001 was 28%. That rate included 13% MSW, 6.3% Construction waste, 5% Arboreal waste (mulch) and 3.7% Yard waste.

OPTIONS:

- 1) Do not set a higher recycling rate at this time.
- 2) Set the recycling rate target at 25% excluding yard waste.
- 3) Target specific rates for specific waste types such as MSW, CDD, or vegetative wastes.
- 4) Set the recycling rate goal higher than the minimum rate without respect to waste type.

This option would establish a higher local recycling rate target based on the existing VDEQ formula. The District could set the rate at 30% or 35% calculated by the VDEQ formula.

SOLID WASTE MANAGEMENT SYSTEM DEFICITS ISSUE #1

Should the Board Take Actions that Would Establish a More Level Playing Field and Stimulate Competition among Solid Waste Service Providers?

BACKGROUND:

The Board's current policy municipal solid waste management is predicated on availability of sufficient capacity at a private transfer facility(ies) supplemented and supported by backup capacity at the County's Solid Waste Management Facility. To that end, the Board has approved sufficient capacity at the private facility to address anticipated needs through 2010. A level playing field among all waste collection providers is dependent on the facility making the capacity available to serve Loudoun needs before other jurisdictions, and assessing tipping fees equitably among all firms that use the facility. Short of entering a formal contractual relationship with the facility, the Board can not require that the capacity be available to serve Loudoun County generated waste on a preferential basis, nor can the Board mandate that the facility impose equitable tipping fees.

It has been reported that there is an issue of equity with both availability and cost of service at the facility by both other firms, and customers of other non-Waste Management firms.

These claims include suggestions that disposal privileges for some firms are suspended on some days, that rates charged non-Waste Management trucks are higher than those charged to Waste Management trucks leading to disincentives to competition, and that there may be preferential status in queuing given to Waste Management trucks which impacts the turn around time of the truck and ability to complete a service route. Staff is not in a position to assess the veracity of any of these claims.

OPTIONS:

- 1) Do not address this issue at this time and allow resolution by market forces.
- 2) Revise the tipping fee rates at the LCSWMF to foster more competition.

This option would establish a level playing field among Loudoun County-based independent collectors, or national collectors who do not own a Loudoun County-based facility. It would also potentially accelerate demand and thus depletion of capacity at the County facility and move up construction of future capacity.

- 3) Permit additional transfer facilities for MSW.
- 4) Enter into a contract with the private facility.

In this option, the purpose of the contract is to purchase capacity and use it to guarantee availability of disposal and equity of pricing to all potential competitors.

SOLID WASTE MANAGEMENT SYSTEM DEFICITS ISSUE #2

How Will the Board Ensure that Adequate Facilities Exist to Support Recently Enacted Yard Waste Recycling Requirements?

BACKGROUND:

Staff has previously reported that a deficit in yard waste capacity might compromise the Board's efforts to improve the level of yard waste recycling. This potential deficit was identified because the majority of the permitted yard waste composting capacity in the County was committed to Fairfax County through contracts. The yard waste composting facility is located in Loudoun County that is capable of processing the yard waste generated as a result of this recycling requirement (Loudoun Composting, LLC). The operator has assured staff that the facility will accept yard waste generated in Loudoun County. The new setout requirements for yard waste included in the amendments to Chapter 1086 approved by the Board do not allow plastic bags as containers for yard waste. This will make Loudoun County's yard waste more desirable as feed stock as it will be less expensive for the facility to compost.

The yard waste recycling requirement may result in an increased amount of yard waste being brought to the County's landfill. Although the landfill currently does not perform composting operations, the facility can act as a drop-off location for residents. The putrescible yard waste (grass) collected at the landfill can then be transported under contract to Loudoun Composting for recycling into compost.

Therefore, this matter is not an issue at this time.

SOLID WASTE MANAGEMENT SYSTEM DEFICITS ISSUE #3

How Will the Board Ensure the Available Capacity of the Current Solid Waste Management System (Facilities) to Handle all Generated Waste?

BACKGROUND:

Chapter 3.0, Section 3.3.3 Summary of System Disposal Capacity of the draft SWMP discusses the County's estimated solid waste facility capacity for both public and private facilities. As shown by Figure 3-3 in that section, the year 2010 is a sort of "threshold" year when the MSW transfer capacity will be exceeded based on waste generation estimates plotted against permitted capacity. Additionally, current MSW facility capacity may not always be available to all potential customers that collect Loudoun County waste if the facility will not accept a particular company's waste for pricing, contractual preference, or other internal corporate reasons.

The "threshold" for CDD waste is even less certain as most of the waste is transferred out of the County. Issue 6 of Solid Waste Management System Deficits addresses a need to determine the County's CDD generation and capacity status.

OPTIONS:

- 1) Establish a method and schedule (every 2-3 years) for reviewing solid waste facility capacity for MSW, CDD, and vegetative waste (assuming that most solid waste will continue to be transferred out of the County).
- 2) Establish a plan to permit additional facility capacity for existing or new facilities in accordance with 9 VAC 20-130-10 et. seq.
- 3) Explore options for mechanisms to ensure that Loudoun County facilities give priority to solid waste generation in Loudoun County.

SOLID WASTE MANAGEMENT SYSTEM DEFICITS ISSUE #4

What are some Waste Reuse and Exchange Options to be pursued by the District?

BACKGROUND:

Waste exchange and reuse can be fostered by providing mechanisms for communicating with and connecting to, materials generators and potential “users” who need and can use, the materials that will become waste if discarded. Loudoun County, as a high growth County with high disposable income, also seems to have many opportunities for creating new connections for waste reuse and exchange.

OPTIONS:

- 1) Identify and enlist a non-profit organization, community service agency, or other interested group with some interest and expertise in materials reuse and exchange to conduct a resource availability and needs assessment for waste reuse and exchange.
- 2) Identify and enlist a non-profit group or groups that can establish a network of communication for waste reuse and exchange.
- 3) Establish funds to provide staffing / contract resources to County solid waste efforts to develop a web-based waste reuse, waste exchange bulletin board and links to related resources.
- 4) Establish feasibility for a Materials Exchange warehouse location in the County for used goods, building supplies and other materials available to non-profit agencies and organizations.

SOLID WASTE MANAGEMENT SYSTEM DEFICITS ISSUE #5

What are Some Options for Ensuring Solid Waste Collection Services in Rural Areas?
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BACKGROUND:

Small independent haulers who have provided solid waste collection for rural Loudoun households are an aging workforce with no apparent business heirs. Portions of Loudoun may remain rural to the extent that rural collection routes may not be profitable for or accessible to larger solid waste collection companies.

OPTIONS:

- 1) Do not address this issue at this time.

This option relies on market demand to dictate the level of solid waste collection service in rural areas of the County.

- 2) Provide an incentive to small independent collectors (defined in Chapters 1084 and 1086 of County Codified Ordinances as “minor” collectors) through a reduced Landfill disposal fee.
- 3) The County could study the need to establish one or more solid waste service districts and manage the contracts for solid waste collection services to households in the service district for rural areas.

SOLID WASTE MANAGEMENT SYSTEM DEFICITS ISSUE #6

Assess the District's Status in Regional Construction/Demolition and Debris (CDD)
Waste Generation, Recycling and Disposal

BACKGROUND:

As one of the fastest growing jurisdictions in the nation, Loudoun County is generating, and will continue to generate, increasing volumes of CDD waste. Most of the CDD waste is currently being transferred for disposal to landfills outside of the County. The need for better information in estimating CDD generation was also identified in the Emergent Issues and Trends discussion on Information Deficits.

OPTIONS:

- 1) Continue to depend on private sector to transfer CDD waste out of the County and assume that the capacity is available.
- 2) Establish a CDD waste reduction, reuse and recycling initiative to elevate management of at least a portion of these materials on the waste management hierarchy.
- 3) Propose and help fund a regional CDD waste generation / characterization study and needs assessment with options and recommendations through the Northern Virginia Regional Commission (NVRC) or the Metropolitan Washington Council of Governments (MWCOC).
- 4) Fund a Countywide study on CDD waste generation / characterization study and needs assessment with options and recommendations for action.

EMERGENT ISSUES AND TRENDS ISSUE #1

Should Consistency between the Zoning Ordinance and the Solid Waste Management Facilities Ordinance with Regard to Solid Waste be a priority?

BACKGROUND:

The Zoning Ordinance and the Solid Waste Management Facilities Ordinance (Chapter 1080) are inconsistent with regard to the terms relating to solid waste facilities and the definitions of these terms. Because Chapter 1080 requires an applicant for a solid waste management facility permit to obtain a statement from the Zoning Administrator indicating that the proposed facility is in conformance with the Zoning Ordinance, the inconsistency in terms between the two ordinances has made obtaining such a clearance confusing for the applicant. Furthermore, coordinating enforcement actions between the two agencies is complicated by the fact that the two ordinances have different meanings for the same term or different terms for the same use. Coordination between the two agencies would be enhanced if the uses in the Zoning Ordinance relating to solid waste were modified to be consistent with Chapter 1080 and Virginia's solid waste regulations.

The processing of waste dirt into topsoil is an emergent use that is not recognized in either Chapter 1080 or the Zoning Ordinance. This use should be incorporated into the Zoning Ordinance and Chapter 1080 with the appropriate level of regulatory oversight. Any such regulatory language pertaining to topsoil production would likely also be companion to the potential regulation of dirt surface piles or "dirt landfills."

Currently, the Zoning Ordinance contains performance standards for materials recovery facilities (MRFs) that are not found in Chapter 1080. These performance standards should be reviewed and revised as necessary. Lastly, there are no performance standards in the Zoning Ordinance for waste transfer stations.

Previously, the Zoning Ordinance contained a prohibition on any landfill not owned and operated by the public. That prohibition apparently was dropped in 1993. It may be appropriate to reinstate the prohibition.

OPTIONS:

- 1) This is not an issue.
- 2) Add consistency review and revision as needed to zoning ordinance time table (with date).

EMERGENT ISSUES AND TRENDS ISSUE #2

What are Some Options for Handling Increasing Types and Amounts of Special Wastes?
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BACKGROUND:

“Special wastes” are materials that are difficult to handle, require special precautions because of hazardous properties, or create problems in normal waste management operations. As noted in Section 3.10.6 of the draft plan, the County (local government) is typically saddled with the responsibility to develop, implement, and fund such programs because the private sector can not make money on them. While the County has some programs in place to manage certain special wastes, higher volumes of existing wastes, changing technologies, and discovery of harmful effects from products create increased demand for special waste handling programs.

OPTIONS:

- 1) Maintain current level of service for County funded special waste programs.

This option would not expand special waste collection efforts to new sites, or increase the types of special wastes collected. The current program includes 7 collection events for household hazardous wastes and operations at the LCSWMF for accepting tires, white goods, scrap metal, lead acid batteries, used motor oil and antifreeze for recycling.

- 2) Expand waste oil and other special waste collection to a regional site in the Western and one in the Eastern parts of the County.
- 3) Provide more routine (i.e. monthly) HHW collection events.
- 4) To help source reduction and reuse of special wastes, fund comprehensive public education for purchasing, handling, storing and disposal of special wastes in residential and non-residential settings.
- 5) Construct a permanent HHW facility for routine acceptance of special wastes, expand collection sites, and train personnel or contracted services to manage increasing waste types and volumes.

EMERGENT ISSUES AND TRENDS ISSUE #3

What Can the LCSWMPD Do to Ensure an Adequate Response to Solid Waste/Debris Disasters?

BACKGROUND:

The solid waste management system relies on an anticipated quantity of waste received balanced with known reliable transfer, recycling and disposal facility capacity. An event such as extreme weather (tornado or flood) or fire, explosion or fatality at a facility or an act of terrorism could overload or disrupt this balance and create a "Solid Waste/Debris Disaster". Solid waste disasters generate solid wastes and debris in extremely large amounts, and/or temporarily disrupt the waste system. After a disaster, access routes in and out of effected areas may be obstructed with solid waste/debris. By planning for such events, the solid waste system can absorb the waste. Local transfer stations and the LCSWMP may not be able to handle the volume or types of waste generated through normal processes. If a transfer station or the LCSWMP is the location of the event, the solid waste system will have to make up for the facility that is "off-line". Predetermined staging areas where wastes are temporarily stored and separated prior to recycling and disposed following a disaster are common in disaster plans. Also, pre-planning and coordination between County agencies, VDOT and other jurisdictions is required for an organized and efficient cleanup following a disaster.

OPTIONS:

- 1) Do not address this issue at this time.
- 2) Procure pre-approval of an emergency solid waste/debris site(s) from VADEQ.

In the face of a disaster, an emergency solid waste/debris site must be permitted by the VADEQ. The VADEQ can pre-approve selected sites for permits, allowing immediate issuance of a permit following a verbal request after a disaster. The process to obtain pre-approval following preliminary site(s) selection includes submission of site mapping, operations and closure plans, and public participation.

- 3) Establish mutual aid agreements with other Northern VA jurisdictions.

In order to be reimbursed by FEMA for aid that is given to or accepted from a neighboring county during cleanup of a disaster a mutual aid agreement must have been established prior to the aid.

- 4) Include SWM planning as an element in the County's emergency management plan.

The County is currently writing an emergency management plan. This plan should address solid waste management in a disaster and may include items 2 and 3 above.

EMERGENT ISSUES AND TRENDS ISSUE #4

Does the County Want to Regulate Unauthorized Dumping of Waste Dirt and/or the Accumulation of Waste Dirt in Surface Piles by Persons that Accept Dirt for a Fee?

BACKGROUND:

Increasing incidents of unauthorized dumping in the County of waste dirt are resulting from land clearing and development activities. This type of dumping most frequently occurs along roadways, in vacant lots, or fields and is often the result of "short hauling," or unauthorized dumping of dirt (i.e., dump truck) in lieu of hauling that dirt to a proper disposal facility. As a result, the cost of disposal is shifted from the company performing the land clearing or development to the property owner on whose land the dirt was dumped.

Other incidents have arisen in which businesses in the County have accepted loads of waste dirt for a fee, which results in the accumulation of that dirt into large surface piles. The acceptance of waste dirt as a money-making venture often results in large piles of unregulated material, that at least in one case, has resulted in a pile of mixed wood waste and dirt that is in excess of 40 feet high. Neither the Zoning Ordinance nor the Solid Waste Management Facilities Ordinance (Chapter 1080) currently addresses the issue of "dirt landfills" or surface piles of waste dirt.

Waste dirt, typically from land clearing and development activities, is not regulated as a solid waste under Chapter 1080. However, solid waste facilities that are regulated under Chapter 1080, in particular, vegetative waste management facilities, often have dirt on site that has been removed (i.e., screened) from woody waste. Operators of these facilities are currently accepting, or have requested permission to accept additional waste dirt at their facilities and process and amend the dirt for eventual sale as topsoil. The processing of topsoil usually results in solid waste as a by-product; however, the soil itself is not a regulated material, and there are currently no restrictions on how much dirt can be received and stored on site. Should the LCSWMPD decide to address the problem of unauthorized dumping of waste dirt or surface accumulation of waste dirt, staff recommends joint revisions to Chapter 1080 and the Zoning Ordinance.

OPTIONS:

- 1) Do not address issue at this time.
- 2) Amend Chapter 1080 and the Zoning Ordinance to restrict unauthorized dumping of waste dirt.
- 3) Amend Chapter 1080 and the Zoning Ordinance to regulate surface piles of waste dirt (i.e., "dirt landfills").
- 4) Amend Chapter 1080 and the Zoning Ordinance to regulate soil processing.

EMERGENT ISSUES AND TRENDS ISSUE #5

Does the Board Want to Prohibit Burning of Solid Waste by Residents?
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BACKGROUND:

The OSWM has received complaints about individuals burning solid waste in the County. Often, these complaints are related to burning of yard waste or MSW. In the more rural parts of the County, burning solid waste in fire pits or barrels is relatively common. However, as development increases in these rural areas, citizens are complaining about the nuisance related to the burning of solid waste (e.g., odor and smoke).

Currently, the Solid Waste Management Facilities ordinance (Chapter 1080) only prohibits burning of solid waste by solid waste management facilities. Although State law prohibits burning of MSW by residents of Virginia, there is no County regulation that mirrors the State's prohibition. As a result, County staff cannot act on complaints about residents burning MSW, but must refer these complaints to the Virginia Department of Environmental Quality.

The Board recently passed amendments to Chapter 1086 of the Codified Ordinances of Loudoun County, that require citizens to recycle yard waste as of July 1, 2003. It would seem that burning yard waste as a means of disposal, rather than recycling, would not be in keeping with the intent of the new amendments.

The OSWM currently has staff that responds to citizen complaints related to solid waste issues; therefore, any change in policy with respect to burning of solid waste is expected to be fiscally neutral.

OPTIONS:

- 1) No change to current regulations.
- 2) Recommend that the Board amend Chapter 1080 to prohibit the burning of MSW.
- 3) Recommend that the Board amend Chapter 1080 to prohibit the burning of yard waste.

EMERGENT ISSUES AND TRENDS ISSUE #6

How Will the District Ensure that the SWMP is implemented and updated in a Dynamic Solid Waste Environment?

BACKGROUND:

Effective solid waste management planning depends directly on the availability of adequate and accurate information about the entire system. The types, volumes, collection, and transportation of waste and the facilities available to process it are all necessary information. Such information resources are used to identify trends and emergent needs in the system; to address the Virginia DEQ waste hierarchy; and, to determine if the Planning District requires new policies, ordinances, or procedures to address its solid waste needs and implement or modify its goals.

In the LCSWMPD, a lack of information in several areas has proved challenging during the present planning process. Currently, the SWMP uses national average generation rates to project figures. The levels of development, construction, wealth, and consumption--important related waste generation factors--are much higher in Loudoun County than in most other jurisdictions. While the use of national averages is an acceptable planning practice, it may not be the most optimal way to project future solid waste management needs in Loudoun County.

OPTIONS:

1) Maintain status quo

This option anticipates that the District will continue to rely upon national averages to estimate generation of waste types in the absence specifically of reported levels.

2) Establish an annual SWMP review process.

This option anticipates an annual review and report by staff to the District assessing waste generation and distribution, trends of recycling rates and an assessment of compliance with the plan and corrections needed. Information needs would be identified in this process.

EMERGENT ISSUES AND TRENDS ISSUE #7

<p>What Opportunities Exist for the County and the Seven Incorporated Towns to Partner to Achieve and Sustain Effective Solid Waste Management?</p>

BACKGROUND:

The County and Towns already have formal relationships in solid waste management in at least six ways:

- Participation in the Loudoun County Solid Waste Management Planning District for planning and management of solid waste generated in the County;
- Cooperative Agreement for application, receipt, administration and reporting on the State Litter Grant Funds;
- Annual Solid Waste Management and Recycling reporting to the State;
- County provides Household Hazardous Waste collection services to all County residents, including Town residents;
- Fee Waivers to seven incorporated Towns granted annually by the County Board of Supervisors for use of the County Solid Waste Management Facility for solid waste generated by town operations; and
- County regulation of solid waste collectors operating in the County, some of which have solid waste and recycling collection contracts with the Towns (County does not have jurisdiction over collectors operating in the Towns unless the Towns adopt the County Solid Waste Ordinances governing collection and recycling).

OPTIONS:

- 1) Do not pursue any further policy or program options at this time.
- 2) Towns could adopt Chapters 1080, 1084, and 1086 to extend uniform enforcement of the County's solid waste management ordinances.
- 3) Towns and County could develop joint contracts for solid waste services and other best practices implementation.
- 4) Other

AGENDA
County of Loudoun County
Ad Hoc SWMP Committee
Wednesday, October 9, 2002 6:00 PM
Board of Supervisors Room, Government Center

1. Welcome/Schedule for Next Several Meetings- Supervisor Kurtz, Chair
2. Follow-up to September 25th meeting-questions/issues
3. Summary of Recycling Issues Discussion
4. Staff presentation of Solid Waste System Issues and Options (Continued)
 - A. Recycling Issues-Discussed on September 25, 2002
 - B. Solid Waste Management System Deficits
 1. Should the LCSWMPD Take Regulatory Actions that Would Establish a More Level Playing Field and Stimulate Competition among Solid Waste Service Providers?
 2. How Will the Board Ensure that Adequate Facilities Exist to Support Recently Enacted Yard Waste Recycling Requirements?
 3. How Will the Board Assess the Available Capacity of the Current Solid Waste Management System (Facilities) to Handle all Generated Waste?
 4. What Are Some Waste Reuse and Exchange Options to be pursued by the District?
 5. What Are Some Options for Ensuring Solid Waste Collection Services in Rural Areas?
 6. What is the District's Status in Regional Construction Waste Disposal Issues?
 - C. Emergent Trends
 1. Should Consistency Between the Zoning Ordinance and the Solid Waste Ordinances with Regard to Solid Waste Related Matters Be a Priority?
 2. What Are Some Options for Handling Increasing Types and Amounts of Special Wastes?
 3. What Can the LCSWMPD Do to Ensure an Adequate Response to Solid Waste/Debris Disasters?
 4. Does the Board Want to Regulate Unauthorized Dumping of Waste Dirt and/or the Accumulation of Waste Dirt in Large Surface Piles by Businesses that Accept Dirt for a Fee?
 5. Does the Board Want to Prohibit Burning of Solid Waste by Residents?
 6. How Will the District Ensure that the SWMP is implemented and updated in a Dynamic Solid Waste Environment?
 7. What Opportunities Exist for the County and the Seven Incorporated Towns to Partner to Achieve and Sustain Effective Solid Waste Management?

Ad Hoc Solid Waste Management Planning Committee
Item 2: Follow-Up to September 25, 2002 Meeting
October 9, 2002

Background:

Chairman Kurtz has requested that questions and issues from prior meetings be specifically addressed at the following meeting. The purpose of this item is to identify any such issues or questions, and provide a response or indicate where the response is included in the scheduled presentation. This item will also be used to transmit the meeting summaries from the previous meeting. Two items were submitted for review. The first came in the form of several questions from Mr. Mason, Town of Leesburg, on what qualifies for calculation of the recycling rate. The second is a letter from Craig Stuart-Paul of Fairfax Recycling, Inc.

Meeting Summary from September 25, 2002

The meeting summary from September 25 meeting of the Ad Hoc SWMPC is included as **Attachment 1**. Please provide any revisions in writing to Leslie Hansbarger.

Questions Regarding Items Used to Calculate the Recycling Rate

Mr. Mason, Town of Leesburg, posed several questions regarding what materials count towards the recycling rate. His questions are in **Attachment 2**. Staff discussed these questions and several others with Steve Coe of the Virginia Department of Environmental Quality (DEQ). The answers from DEQ are included in Attachment 2.

Cost Impacts of County Ordinance Adoption on the Towns' Contracts

The Committee asked County staff to explore possible cost impacts on each Town's solid waste services contract should that Town adopt Chapters 1084 and 1086 of the Codified Ordinances of Loudoun County. The results are in **Attachment 3**.

Letter from Craig Stuart-Paul, Fairfax Recycling, Inc.

At the September 25 meeting, Mr. Stuart-Paul made comment to the Committee about his desire to expand his company's operations in Loudoun County, addressing several issues in the solid waste management system in the County (see Meeting Summary, Attachment 1 to Item 2). Mr. Stuart-Paul sent a letter dated October 2, 2002, to Chairman Kurtz to formalize his comments. The letter is **Attachment 4** to this item.

- Attachment 1: Meeting Summary dated September 25, 2002, Ad Hoc SWMPC
- Attachment 2: Questions and Answers On Materials for Recycling Credit
- Attachment 3: Cost Impacts of County Ordinance Adoption on the Towns' Contracts
- Attachment 4: Letter from Craig Stuart-Paul, Fairfax Recycling, Inc.

Attachment 1
Meeting Summary dated September 25, 2002
Included in Appendix D

Loudoun County Solid Waste Management Planning Committee
Item 2, Attachment 2
Response to Recycling Questions from the Town of Leesburg
October 9, 2002

Tom Mason, a representative from the Town of Leesburg, requested that County staff research several recycling initiatives and their validity for calculating recycling rates. The information is as follows:

1. Does the process that Leesburg uses on sludge count as recycling?

Leesburg dries and pellitizes its sludge, which is bagged and distributed for use as a soil amendment. According to Steve Coe of Virginia DEQ, Leesburg would not get recycling credit for this practice because it is not composting.

2. Does reused waste dirt from construction projects count as recycling?

Leesburg makes an effort to minimize the amount of waste dirt from construction projects. Much of it is re-used on another project. According to Mr. Coe, Leesburg would not get recycling credit for these efforts because the dirt was never waste.

In addition to those questions posed by Mr. Mason, staff advanced several questions to DEQ staff as follows:

3. Does the asphalt milled and reused on road jobs count toward recycling credit?

Milled asphalt paving does not count as recycling.

4. Does the concrete that is collected in a special program, crushed for aggregate, and resold count toward recycling credit?

Only if the concrete recycling is a formal program that takes the concrete out of the waste stream that formerly was buried.

5. Does the end-of-day concrete that is washed out of trucks and reused count toward recycling credit?

No.

Loudoun County Solid Waste Management Planning Committee
Item 2, Attachment 3
Cost Impacts of County Ordinance Adoption on the Towns' Contracts
October 9, 2002

During the discussion of recycling policy issues at the September 25, 2002 meeting of the Ad Hoc SWMP Committee, the Committee discussed the possibility of co-adoption of the County's solid waste collection and recycling ordinances (Chapters 1084 and 1086) in order to standardize recycling collection efforts Countywide. The incorporated towns and the County agreed on the value of standardization of recycling; however, Town representatives expressed concerns that the imposition of additional recycling requirements would result in increased costs to Towns. At the direction of the Committee, Staff was requested to collect information to assess the possible increase in costs due to co-adoption.

Several Towns have signed contracts with solid waste haulers with requirements that closely resemble the County's recycling requirements. These contracts contain provisions for the collection of specific materials that mirror the County's requirements with two exceptions: 1) curbside collection of cardboard and 2) set out requirements for yard waste. Only one incorporated Town has a current contract providing for the curbside collection of cardboard. Also, where there is a provision for yard waste, it may be collected in plastic bags, as opposed to the County's requirement of using paper bags only. Staff could only confirm that three of the seven town contracts prohibit the disposal (i.e., burial) of source separated recyclables, an act which is specifically prohibited under the County ordinances.

The chart below provides information provided by the haulers on the estimated increase in collection costs in the event the Towns adopt the solid waste and recycling ordinances.

Collector	Towns Served	Materials Collected	Estimated Cost Increase
Con-Serv, Industries, Inc.	Middleburg	All materials currently specified in the County Ordinances.	\$0.00
American Disposal Services	Hamilton, Lovettsville, Round Hill	NOT Cardboard or Paperboard Yard waste accepted in Plastic Bags	*Cost Increase Expected. Amount Unknown.
Waste Management, Inc.	Hillsboro, Purcellville, Leesburg	NOT Cardboard, NO PROHIBITION AGAINST DISPOSAL OF RECYCLABLES	No response provided.

***Cost increase expected due to additional manpower and equipment costs, and volume of recyclables collected weekly.**

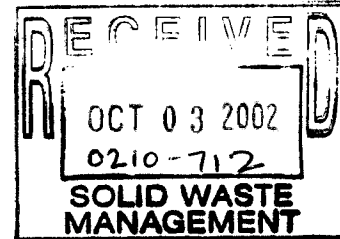
It is reasonable for Towns with contracts expiring in the 2002/2003 time frame to experience a cost increase regardless of whether or not they choose to co-adopt Chapters 1084 and 1086. Cost increases could result from a number of factors, including increasing Town populations and fluctuating market costs.



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Supervisor Sally Kurtz
Chair, Ad Hoc Solid Waste Management Committee
Loudon County Board of Supervisors Office
Box 700
Leesburg, VA 20175

October 2nd, 2002

Dear Ms. Kurtz,

My company, Fairfax Recycling, Inc. processes over 10,000 tons per month of curbside recyclables from various municipalities including those in Loudon County. We have been approached on several occasions by hauling companies with whom we do business, on the subject of locating a recycling facility in Loudon County.

These haulers have mentioned that transporting recyclables to our nearest facility in Burke, VA is time consuming and limits the effectiveness of their collection activities. I am told that the only other local alternative disposal facility charges high rates for accepting recyclables. These expenses, both direct and as a result of inefficiencies, are being passed on to their customers in Loudon County.

We have conducted investigations concerning building a recycling facility in Loudon County, but have decided that it is unfeasible given local zoning laws and lack of economically priced land in the appropriate zoning districts.

Fairfax Recycling would however be interested in building and operating a recyclables transfer/processing facility at the Loudon County Landfill. We would construct this facility at our own expense, and allow local haulers to dump recyclables into 120 cubic yard trailers for transfer to one of our processing facilities. We would also accept a variety of materials from the public.

The benefits of this plan to Loudon County could potentially include:

- ☐ Reduced collection costs to townships and residents.
- ☐ Increase in recycling rates.
- ☐ Increase in recyclables collection service and scope.
- ☐ Reduced traffic (1 transfer trailer = 5 route trucks)
- ☐ Potential revenue to the County in the form of rebates.
- ☐ A professionally managed site to marshal secondary recyclables (e.g. carpet)
- ☐ And logically from above – landfill life extension.

We believe that for recycling to grow in Loudon County along with the growth in population, there needs to be an expansion of infrastructure. We would welcome the opportunity to discuss this plan further, or to formalize a proposal at the request of the board.

I thank you for your consideration and remain,

Yours Sincerely

A handwritten signature in black ink, appearing to read 'C Stuart-Paul', with a large, stylized initial 'C' and a large 'S'.

Craig Stuart-Paul
President.

cc. Mr. Richard S. Weber

Loudoun County Solid Waste Management Planning Committee
Item 3: Summary of Recycling Policy Discussion
October 9, 2002

At the September 25th meeting of the Ad Hoc Solid Waste Management Planning Committee, the Committee discussed the first of three sets of solid waste management policy issues. Following discussion, the Committee cast straw votes on the options for each of four recycling issues. The following is a summary of the straw votes on the recycling issues. The policy positions below are suggested as affirmations or modifications of the existing Solid Waste Management Strategy as described in this plan. Once these positions are confirmed, staff will incorporate them into the Implementation Plan (Chapter 6).

1. The Committee determined that full implementation of the recently adopted amendments to Chapters 1084 and 1086 of the Codified Ordinances of Loudoun County should be sufficient to sustain compliance with the State-mandated 25% recycling rate.
2. The incorporated Towns and the County agree on the value of standardized approaches to recycling. The Town representatives agree that adoption of Chapters 1084 and 1086 by the Town councils would be desirable, but are concerned about the financial impact. Staff was directed to provide the Committee supplemental information on the collection contract costs to the Towns of co-adoption of the County ordinances.
3. The Committee determined that a greater level of effort must be expended to promote recycling and educate the public on how to effectively recycle.
4. The Committee decided not to expand the current recycling effort to obtain higher recycling rates.
5. The Committee determined that the District should leave the recycling rate goal at 25%.
6. The Committee decided against setting specific recycling percentage targets for of any particular portion of the waste stream.
7. The Committee decided not to exclude yard waste from recycling calculations.
8. The Committee determined that the District should continue to use the State-authorized formula for calculating the recycling rate when setting goals and assessing results for recycling and for regulatory reporting.

9. The Committee determined that staff should formally monitor progress of the implementation of the ordinance amendments and report results to the District membership on a regular basis. Such reports would include an assessment of any additional effort needed to comply with the State mandates.
10. Develop a recycling dropoff center plan for co-locating DOCs in a comprehensive countywide joint-use public facility plan for all major public facilities. Such locations would include parks, schools, fire stations, and other sites. These DOCs should be included in the planning and construction planning for all regional government sites
11. The Committee determined that a citizens group should be appointed at the conclusion of the SWMP process to identify options, assess viability, and recommend approaches and funding for response to any future increases in the mandated recycling rate.
12. The Committee wants to investigate the possibility of distributing information about County solid waste policies, especially recycling, via students in Loudoun County Public Schools.

Non-Votes

The Committee did not vote on the following options in Recycling Issue #2.

1. Funding additional DOC sites is not a current priority due to budget constraints.
2. Develop a capital improvement and funding schedule to construct and operate DOCs for immediate needs in the Purcellville area, to replace three sites lost in 1995, and for immediate needs in the Ashburn and South Riding areas.
3. Develop a capital improvement and funding schedule to fully implement the County's current recycling policy.

NOTE: The Board of Supervisors recently reaffirmed its recycling policy but the policy objectives remain critically underfunded. The Ad Hoc SWMP Committee voted (7-0) for Option 4 in Issue 2, which Option addressed future siting but not funding for construction. The most significant need for a DOC site is in the Purcellville area, and a site with the Loudoun County Public Schools Bus Parking and Maintenance Facility (old Carlisle & Anderson site) has been identified. Operation funding exists, but site development funding is not budgeted.

Ad Hoc Solid Waste Management Planning Committee
Item 4: Continuation of Staff Presentation of Solid Waste System Issues and
Options for Consideration by the Ad Hoc Planning Committee
October 9, 2002

Background:

This item presents to the Ad Hoc SWMP Committee the remaining two sets of issues in a series of three sets. These issues have been identified in earlier materials distributed to the Ad Hoc SWMP Committee. There are three general topics, previously identified by Chairman Kurtz: Recycling Issues, Solid Waste Management System Deficits, and Emergent Trends in solid waste.

The Committee discussed the recycling issues on September 25. Due to time constraints, the Committee did not discuss the issues on Waste Management System Deficits or Emergent Trends at that meeting. The issues being discussed in this item were distributed as items 5B and 5C in the packet for the September 25th meeting. Staff will have additional copies of these issues.

Solid Waste Management System Deficits

This item (**Item 5B from the 9-25-02 packet**) describes deficits in the current solid waste management system and presents several options for consideration.

1. Should the LCSWMPD Take Regulatory Actions that Would Establish a More Level Playing Field and Stimulate Competition among Solid Waste Service Providers?
2. How Will the Board Ensure that Adequate Facilities Exist in the Immediate Timeframe to Support Efforts by Residents and Businesses to Comply with Recently Adopted Solid Waste Collection, Transportation, and Recycling Code Amendments?
3. How Will the Board Assess the Available Capacity of the Current Solid Waste Management System (Facilities) to Handle all Generated Waste?
4. What Are Some Waste Exchange & Reuse options to be pursued by the District?
5. What Are Some Options for Ensuring Solid Waste Collection Services in Rural Areas?
6. What is the District's Status in Regional Construction Waste Disposal Issues?

Emergent Trends

This item (**Item 5C from the 9-25-02 packet**) describes emergent trends in the current solid waste management system and presents several options for consideration.

1. Should Consistency Between the Zoning Ordinance and the Solid Waste Ordinances with Regard to Solid Waste Related Matters Be a Priority?
2. What Are Some Options for Handling Increasing Types and Amounts of Special Wastes?
3. What Can the LCSWMPD Do to Ensure an Adequate Response to Solid Waste/Debris Disasters?

4. Does the County Want to Regulate Unauthorized Dumping of Waste Dirt and/or the Accumulation of Waste Dirt in Large Surface Piles by Businesses that Accept Dirt for a Fee?
5. Does the Board Want to Prohibit Burning of Solid Waste by Residents?
6. What are some Information Deficits in the Solid Waste Management System?
7. What Opportunities Exist for the County and the Seven Incorporated Towns to Partner to Achieve and Sustain Effective Solid Waste Management?

Related Documents:

Item 5B: Solid Waste Management System Deficits

Item 5C: Emergent Trends

AGENDA
Loudoun County Ad Hoc Solid Waste Management Planning Committee
Wednesday, October 23, 2002 6:00 PM
Aspen Room, 906 Trailview Blvd. SE, Leesburg

1. Welcome—Supervisor Sally Kurtz, Chair
2. Follow-up to October 9 meeting-questions/issues
 - A. Meeting Summary from October 9, 2002
 - B. Response to letter from Buff Mundale, American Disposal Services
 - C. Landclearing and the Loudoun Environmental Indicators Project
 - D. Use of Grant Funds for Recycling Education
 - E. Response Regarding Legality of Economic Incentives
3. Response to Request for Information Regarding a Public-Private Partnership Recycling Transfer Station at the Landfill
4. Analysis of Tipping Fees and Disposal Capacity Consumption at the Landfill
5. Summary of Issues Discussion for Recycling and Solid Waste Management System Deficits
6. Staff presentation of Solid Waste System Issues and Options (Continued)
 - A. Recycling Issues—Discussed on September 25, 2002
 - B. Solid Waste Management System Deficits—Discussed on October 9, 2002
 - C. Emergent Trends
 1. Should Consistency Between the Zoning Ordinance and the Solid Waste Ordinances with Regard to Solid Waste Related Matters Be a Priority?
 2. What Are Some Options for Handling Increasing Types and Amounts of Special Wastes?
 3. What Can the Loudoun County Solid Waste Management Planning District (LCSWMPD) Do to Ensure an Adequate Response to Solid Waste/Debris Disasters?
 4. Does the Board Want to Regulate Unauthorized Dumping of Waste Dirt and/or the Accumulation of Waste Dirt in Large Surface Piles by Businesses that Accept Dirt for a Fee?
 5. Does the Board Want to Prohibit Burning of Solid Waste by Residents?
 6. How Will the District Ensure that the SWMP is Implemented and Updated in a Dynamic Solid Waste Environment?
 7. What Opportunities Exist for the County and the Seven Incorporated Towns to Partner to Achieve and Sustain Effective Solid Waste Management?

Ad Hoc Solid Waste Management Planning Committee
Item 2: Follow-Up to October 9, 2002 Meeting
October 23, 2002

Background:

Chairman Kurtz has requested that questions and issues from prior meetings be specifically addressed at the following meeting. The purpose of this item is to identify any such issues or questions, and provide a response or indicate where the response is included in the scheduled presentation. This item will also be used to transmit the meeting summaries from the previous meeting. One formal item was submitted by Mr. Buff Mundale of American Disposal Services.

Meeting Summary from October 9, 2002

The meeting summary from October 9 meeting of the Ad Hoc SWMPC is included as **Attachment 1**. Please provide any revisions in writing to Kate Sicola.

Letter from Buff Mundale of American Disposal Services

At the October 9 meeting, Mr. Mundale submitted a letter dated October 9, 2002, to Chairman Kurtz to formalize comments he made at a previous meeting (see Meeting Summary, Attachment 1 to Item 2). Staff response and the letter are in **Attachment 2**.

Request for Information to Loudoun Environmental Indicators Project (LEIP)

In preparation for the initial meeting of the Ad Hoc SWMP Committee on September 11, 2002, County staff contacted LEIP staff at the George Washington University about landclearing activity in Loudoun County. County staff had worked with experts in the solid waste management industry to estimate tons of vegetative waste generated from the clearing of one acre of forested land, and sought acreage of land cleared in order to develop waste generation projections. Dr. Dorn McGrath of GWU has responded to the inquiry. Dr. McGrath indicated that LEIP does not currently track acres of land cleared; instead, the Project tracks acres lost to development. Dr. McGrath suggested that acres of woodland cleared would be of interest to LEIP, and that perhaps Loudoun County could suggest such a study for a future project for LEIP.

Use of Grant Funds for Recycling Education

The Committee asked County staff to explore possible grant opportunities to expand public knowledge about recycling opportunities and techniques in the County. Response is included as **Attachment 3**.

Economic Incentives for Small Haulers

The County Attorney indicated that additional time is needed to research this matter.

- Attachment 1: Meeting Summary dated October 9, 2002, 2002, Ad Hoc SWMPC
- Attachment 2: Letter from Buff Mundale of American Disposal Services
- Attachment 3: Use of Grant Funds for Recycling Education

Attachment 1
Meeting Summary for October 9, 2002
Included in Appendix D

Loudoun County Ad Hoc Solid Waste Management Planning Committee
Item 2, Attachment 2
Letter from Buff Mundale of American Disposal Services and Response
October 23, 2002

At the October 9 meeting, the SWMPC received a letter from American Disposal Services, located in Manassas Park, Virginia. Staff was directed to review and comment on the letter. A copy of the letter is included at the end of this discussion. This firm is a relatively new player in the local solid waste collection industry and desires to offer competitively priced collection services in Loudoun County.

American Disposal expressed two concerns in their letter to the Committee:

- 1) Lack of a level playing field for collection companies
- 2) Lack of local recycling infrastructure to support recycling requirements

Staff Assessment

Lack of Level Playing Field

The letter states that the lack of a level playing field in Loudoun stymies competition between independent haulers and Waste Management who owns and operates the only municipal solid waste transfer station in the County. American Disposal Services requests the Committee to consider a special reduced tipping fee at the County Solid Waste Management Facility to provide a level playing field to small independent waste collection companies.

The SWMPC began discussion of this matter in Issue 1 of the System Deficits issues. One option posed by staff was to lower tipping fees at the County facility to foster competition. Issue 5 addressed incentives to rural collectors but not necessarily small independents. The Committee tabled discussion on both the competition and the incentives for rural solid waste collection issues and requested supplemental information on the effects of reducing tipping fees, which is provided in Item 4.

Lack of Local Recycling Infrastructure to Support Recycling Requirements

The second issue raised by American Disposal was the lack of recycling facilities in Loudoun County and the cost of transporting recyclables to Fairfax material recovery facilities. The Committee was requested to consider a recommendation to the Board to place a recycling facility at the County Solid Waste Management Facility. This suggestion is the same as that posed by AAA Recycling and Trash Removal Services and Fairfax Recycling. The letters submitted by these two firms were responded to on October 9 in an addendum to Item 2. The Committee requested supplemental information on the possibility of entering into a private/public partnership that would be based on a privately constructed and operated recycling depot on the County's property. That information is provided in Item 3.



9 October 2002

To: Loudoun County Ad Hoc SWMP Committee

cc: Loudoun County Office of Solid Waste Management

Re: Items for consideration

As a relatively new independent waste hauler operating in Loudoun County, American Disposal Services would like to offer the following items for consideration by the SWMP Committee.

Item A.

One consideration for the Board under "Solid Waste Management System Deficits Issue #1", Option item number 2, is to revise the tipping fee rates at the LCSWMF to foster competition. Waste companies that have their own landfill &/or waste transfer facilities have a decided advantage over waste companies that do not have their own facilities. The lack of a "level playing field" has stymied competition in Loudoun County, especially from independent haulers. In Prince William County where the tipping fee at the landfill is zero, a number of new waste hauling companies has sprung up because no one company has an advantage. If small independent haulers could bring their waste into the LCSWMF for a tipping fee in the \$40 - 45/ton range, then they would not be forced to haul their waste to Fairfax County or use the competitor's facilities. We strongly support implementing a special rate at the LCSWMF for small independent waste companies. This would also benefit the citizens of Loudoun County by fostering competition thereby lowering rates that waste companies have to charge the citizens.

Item B.

A second issue is the lack of recycling facilities (material recovery facility or "MRF") in Loudoun County. Most recyclables have to be transported to facilities in Fairfax County for processing. This is time consuming and expensive. We propose that the County consider allotting space at the LCSWMF for depositing recyclable materials. The recyclables could then be transferred to a MRF in Fairfax County or elsewhere for processing. This type of system is being operated successfully at the Prince William County Landfill. We are aware of at least one recycling processor that would be willing to operate such a recyclables transfer facility at the LCSWMF. This is especially important now because of the new recycling mandates recently implemented by the County. Again, this would "level the playing field" for independent haulers that do not have their own facilities.

American Disposal Services intends to expand our operations in Loudoun County. Implementation of the above recommendations would assist us in our expansion efforts and would encourage other independent waste companies to come into the County.

Loudoun County Ad Hoc Solid Waste Management Planning Committee
Item 2, Attachment 3
Use of Grant Funds for Recycling Education
October 23, 2002

During the October 9 meeting, Supervisor Towe raised a question regarding the availability of grant funding to support media campaigns for recycling. Mr. Weber of the Office of Solid Waste Management indicated that the County currently uses the Virginia Litter Prevention and Recycling Grant to fund educational programs in public elementary schools to encourage recycling.

The Virginia Litter Prevention and Recycling Grant supports the development of educational and/or promotional material for recycling but Grant funds cannot be used to purchase mass media advertising time or space. Staff has contacted Virginia Department of Environmental Quality, the Virginia Recycling Association, National Recycling Coalition, and U.S. Environmental Protection Agency for information leading to grant opportunities but has yet to reveal any that would directly finance the use of mass media for public outreach.

Loudoun County Ad Hoc Solid Waste Management Planning Committee
Item 3: Response to Request for Information Regarding a
Public-Private Partnership Recycling Depot
at the Loudoun County Landfill
October 23, 2002

Background

During the October 9 meeting, the Ad Hoc SWMP Committee directed staff to respond to the systems deficit issue of lack of recycling infrastructure in Loudoun County. Industry representatives expressed to the Committee an interest in a centrally located recyclables depot or transfer facility, possibly located at the Loudoun County Solid Waste Management Facility (LCSWMF). The Committee directed staff to prepare a report about a potential facility located at the LCSWMF that might be operated as a public-private partnership.

General Description

A public-private partnership is envisioned between the County and a firm or group of firms to design, permit, construct, and operate a transfer and processing facility for source-separated recyclables. This facility would benefit the County by providing an equitable tipping site for recycling haulers and institutions and reducing transportation costs to recycling facilities in adjacent localities, thereby improving recycling rates.

The facility would receive recyclable materials from permitted haulers, institutions, and government entities only. The private partner would supply all labor and equipment necessary to perform all operations of the transfer facility. The County would not be responsible for any costs associated with facility operations, including insurance.

The facility would be a fully enclosed structure for receiving source-separated recyclable materials. The structure and the travelway around the facility would be completely surrounded by a fence. These would serve to contain litter, dust, and noise within the facility site to the greatest extent possible.

The design of the facility must meet all Loudoun County ordinances including site planning and zoning ordinance requirements, in addition to any and all applicable regulations or requirements imposed by the Commonwealth of Virginia and Federal law.

The County would reserve the right to approve or reject any and all transfers of interest by the private partner.

Permitting, Construction, and Operations

All costs would be the responsibility of the private partner, including construction, design, permitting, operations, and maintenance. The private partner would be responsible for ensuring that all construction complies with any local, state, and federal regulations and requirements. The private partner would assume the same responsibility for any subcontracted construction. Site security would be the

responsibility of the private partner. Illegal dumping would be the responsibility of the private partner.

The partner would be responsible for acquiring and maintaining any and all applicable permits required. The private partner would obtain and maintain a SWMF permit as a Transfer Station/Materials Recovery Facility, per Chapter 1080, "Solid Waste Management Facilities." The private partner and its agents would not conduct any activities or manage operations at the facility in a manner that could jeopardize the County's DEQ permit terms and conditions.

The facility would accept for transfer all recyclable materials listed in Chapter 1086, "Solid Waste Reduction and Recycling Ordinance." The facility may also serve as a collection and/or transfer point for other materials to be recycled, depending on the County's emerging recycling opportunities and subject to approval by the County. The facility would accept only materials that have been source-separated and collected for the purpose of recycling. The private partner would be responsible for all materials received. All materials would be contained inside the structure until time of export and in compliance with solid waste ordinances. The private partner would be responsible for transferring received materials to an appropriate processing facility or market for the purpose of recycling. The private partner would assume same responsibility for any subcontracted transfer services.

Goals

- Construction would be completed within 12 months of the time of award.
- Tipping fees would be assessed on an equitable basis.
- The facility would serve as a demonstration / pilot site for future recycling initiatives and emerging recycling opportunities, subject to approval by the County.
- The facility design could incorporate a permanent HHW collection area.
- The private partner would agree to operate with a maximum amount of bypass or residual waste (based on weight) of 5% for all materials. The 5% residual waste would be a daily average, calculated weekly.
- The County envisions a partnership term of ten years or more. At the end of the term, the partnership could be extended, transferred, or terminated.

Other Opportunities

In addition to a transfer station, the public private partnership at the Landfill could potentially create other opportunities for recycling of waste: e.g., a permanent Household Hazardous Waste (HHW) facility or recycling of targeted construction waste.

**Loudoun County Ad Hoc Solid Waste Management Planning Committee
Item 4: Analysis of Tipping Fees and Disposal Consumption at the Landfill
October 23, 2002**

During the October 9th discussion of issue one of Solid Waste System Deficits, the Committee requested County staff to determine what tipping fee price would result in the most efficient level of customers and tonnages at the landfill. The Committee is particularly interested in how tipping fees lower than the current rate would affect the life span of the Landfill capacity.

Staff have worked with the County's solid waste engineering consultant, Solid Waste Services (SWS) since the October 9th meeting to respond to the Committee's request. The Committee should know that the information provided is provided in good faith, but is limited by the time available to develop it. What the Committee asked for is actually a detailed fee study that would normally take multiple months and would require the hiring of specialized consultants.

The assessment developed by SWS is included as Attachment 1 to this item. SWS assessed four tipping fee scenarios:

- 1) status quo-\$55.00/ton,
- 2) a reduction of the tipping fee to \$52.00,
- 3) a reduction of the tipping fee to \$50.00, and,
- 4) a reduction of the tipping fee to \$47.50

The assessment considers the effect on operations and capital construction budgets, revenues, disposal capacity consumption rates, and impact on local tax funding that would likely occur in the four scenarios.

In summary, SWS reports that any of the scenarios that reduce the tipping fee result in a reduction of the cumulative burden on local tax dollars that occurs from maintaining the status quo. The assessment indicates that the County could choose any of the three scenarios and address the level playing field to some degree while covering some or all of the capital construction costs of new cells and closure projects while remaining a minor player in the disposal arena and conserving future disposal capacity.

Should the Committee desire to pursue this matter, staff and the Consultant recommend a more detailed analysis prior to modifying operations or tipping fees.

Attachment: Preliminary Tipping Fee Assessment, Solid Waste Services, LLC., October 17, 2002, 9 pages



"We provide solid waste experts with extensive worldwide experience and a low-overhead organization to meet our clients' needs"

October 17, 2002

Mr. Richard S. Weber, Director
Office of Solid Waste Management
County of Loudoun
906 Trailview Blvd SE Ste B
Leesburg VA 20175-4404

Subject: Preliminary Tipping Fee Assessment
Loudoun County Solid Waste Management Facility (LCSWMF)—Permit No. 1

Dear Mr. Weber:

This letter presents Solid Waste Services, LLC preliminary assessment of the tipping fee at the LCSWMF. Please note that this assessment is only a preliminary study of this topic and was prepared over a short period of time. If the County wishes to pursue any of the options presented in this assessment, we recommend that a more thorough tipping fee assessment be conducted to provide more solid ground for implementation.

Summary

There are multiple options that the County may want to pursue relative to future use of the Landfill. This report represents a "preliminary" assessment of market and financial conditions under various scenarios that increase waste flow to the Landfill. Because of the large capacity of the landfill, none of the options considered will significantly impact the long-term availability of landfill disposal for waste generated within the County. The increased waste flow options appear to meet the County's stated policy of having a "safety net" disposal option and respond to the Ad Hoc SWMP Committee's request for information on impacts of achieving a more "level playing field" among County waste haulers while not significantly increasing disposal capacity consumption.

Because of the existing low level of waste flow and high overall fixed costs of County disposal, all increased waste flow options provide additional "net" revenue to the County General Fund. The County currently plays an insignificant role in the MSW disposal market (currently 97% of MSW is disposed in non-County facilities). Reduced tipping fees of \$47.50 - \$52 / ton for MSW would likely result in the County receiving 10% to 30% of the MSW market and significantly increase its net revenues, while not becoming the major disposal option. As market conditions are highly variable and unpredictable, it is possible that slight or moderate reductions in tipping fees may capture more (or less) than the amounts of waste projected.

Background

The Loudoun County Ad Hoc Solid Waste Management Planning Committee is considering options for modifying the existing facility fee structure to address two issues:

- To respond to a request for a “level playing field” among waste haulers for disposal market conditions
- Need for opportunities to sustain collection service in rural areas of the County through economic incentives (e.g., lower tipping fees at County landfill)

There are basically three disposal options available to private haulers:

- Waste Management’s Old Dominion transfer station
- Loudoun County Landfill
- Fairfax County I-66 transfer stations (an option to a lesser extent)

Solid Waste Services LLC was requested to conduct an analysis of options that sufficiently reduce the tipping fee at the County Landfill to increase tonnage and revenues and provide County waste haulers competitive disposal services relative to Waste Management and Fairfax County while not increasing demands on local tax dollars or substantially escalating disposal capacity consumption.

This assessment presents an analysis of four different scenarios:

- “As Is” representing the current operations, tipping fees and waste flows (allowing for some background growth)
- “To Be” options (3) representing lower tipping fees and predicted operating levels that may result from the lower fees

“As Is” Conditions

- County tipping fee has been set at \$55 / ton since 1993; This fee is higher than disposal options of WM’s transfer station and Fairfax County
 - Fairfax County’s disposal fee for contract customers is \$40/ton (non-contract customer fees are \$45/ton); Fairfax County has increased its tipping fee over the last few years and \$2/ton in FY’2003.
 - Waste Management’s Old Dominion Transfer Station fees vary by customer and is estimated at between \$45-\$52 / ton
- County policy for the landfill has been oriented toward providing long-term disposal capacity as a public service “safety net” for County customers
- The County collected \$763,000 in tipping fees at the landfill in FY’2002 (see Table 1); this represents a 22% increase over actual revenues in FY2001 which was a 28% increase over FY2000 (FY2000 revenues were 5% greater than FY1999). The remainder of revenues required for the County solid waste program is paid from General Fund tax revenues.

- Tipping fee revenues were approximately \$3 million per year from FY1991-FY1993. After the tipping fee increase and disposal market changes in the mid-1990s, revenues declined substantially until FY1999.
- Operating costs at the County landfill were \$1,229,600 in FY2002 for Pit and Daily Operations. Total operating costs for the Office of Solid Waste Management were \$2,907,700 for FY2002 (includes Closure/Post-Closure, Environmental Monitoring, Compliance, and Recycling/Diversion).
- County haulers are bringing a small percentage of their waste collected to the County landfill (see Table 1)
 - In FY2002, private haulers/contractors paid \$370,000 and brought 7,700 tons of MSW and other waste to the County and homeowners/small businesses paid \$392,000 and brought 6,900 tons of waste to the County.
 - The Old Dominion transfer station reported that they received 110,000 tons of MSW (103,000 from Loudoun Co.) and 6,000 tons of construction/demolition waste in 2001.
 - Private haulers/contractors brought only 3,800 tons of MSW to the County landfill in 2002. This represents less than 4% of the MSW brought to Old Dominion.
 - Private hauler MSW tonnage reported in the County 2001 Recycling Reports indicate a total of 100,000 tons/yr with 76,000 tons/yr if WMX is excluded (see Table 2).
 - Thus, the landfill is capturing only 3,800 tons of 76,000 tons from haulers other than WMX (which operates the transfer station).
 - Based on an estimated 142,000 tons/yr of MSW generated in Loudoun County, the landfill is capturing approximately 3% of this market.

Analysis of “To Be” Options

Private haulers have the option to bring waste to the Old Dominion Transfer Station, the County Landfill, or the Fairfax County I-66 Transfer Station and slight reductions in the per ton fee can result in material savings on a per truck basis and per day basis. Three tipping fee options were analyzed to assess the impacts of lower tipping fees and increased tonnage at the County Landfill and to provide County waste haulers more competitive disposal services.

- Tipping fees of \$52 / ton (assumes 10% of County MSW is captured – Low Flow)
- Tipping fees of \$50 / ton (assumes 20% of County MSW is captured – Medium Flow)
- Tipping fees of \$47.50 / ton (assumes 30% of County MSW is captured – High Flow)

Table 1
Loudoun Co. Landfill Revenues - FY2002 Actual

	MSW	Other	Total
Haulers/Contractors			
- Tonnage	3,857	3,856	7,713
- Revenue	\$212,169	\$158,240	\$370,409
- Avg. \$/ton	\$55.01	\$41.04	\$48.02
Homeowners			
- Tonnage	4,326	2,541	6,867
- Revenue	\$237,342	\$155,318	\$392,660
- Avg. \$/ton	\$54.86	\$61.12	\$57.18
Total (Revenue)			
- Tonnage	8,183	6,397	14,580
- Revenue	\$449,511	\$313,558	\$763,069
Govt. / Non-Profit*			
- Tonnage	6,012	15,110	21,122
- Charges (non-rev)	\$330,650	\$347,804	\$678,454
Total (Rev/Non-Rev)			
- Tonnage	14,195	21,507	35,702
- Charges (non-rev)	\$780,161	\$661,362	\$1,441,523

* Tipping fees are waived for County Government & not for profit customers.

Table 2
MSW Waste Tonnage Reported by Major Hauler
in Loudoun County

Waste Hauler	Residential	Commercial	Total
AAA	6,085	10,814	16,899
BFI	5,094	24,926	30,020
WMX	19,944	3,720	23,664
MM	1,109		1,109
CSI	50	27,818	27,868
Other	312		312
Total	32,594	67,278	99,872
Total w/o WMX	12,650	63,558	76,208

Note: Major hauler are defined as those having 4 or more trucks or collecting more than 2,000 tons/yr.

Source: 2001 Recycling Report

As market conditions are highly variable and unpredictable, it is possible that slight or moderate reductions in tipping fees may capture more (or less) than the amounts of waste projected. These assumptions were analyzed as reasonable based on current pricing conditions and MSW quantities. Any increase in waste flow levels would result in the County moving to 6 day / week operations to include Monday operations.

Table 3 below summarizes the results of the waste flow scenarios assuming tipping fees of \$55, \$52, \$50 and \$47.50 / ton at the County Landfill.

Table 3
Tonnage to Landfill Under Flow Scenarios (2003 est)

	Haulers	Homeowner	Govt. NFP*	Total
As Is Tonnage	8,253	7,348	22,601	38,202
Low Flow Scenario	20,494	7,348	22,601	50,443
Medium Flow Scenario	35,678	7,348	22,601	65,627
High Flow Scenario	50,862	7,348	22,601	80,811

* Govt/NFP tonnage is waived from tipping fees.

This analysis assumes that the waste flow shift occurs within a 1 year period. Under the High Flow scenario, total waste to the landfill would roughly double from 38,000 tpy to 80,800 tpy (approximately 20,000 tpy of this amount is estimated to be recycled and/or reused e.g., large part being rubble from VDOT).

Financial Projections

Tipping fee options for Loudoun County landfill disposal were developed based on current pricing/disposal conditions and conversations with local haulers. The cost for transfer and hauling of waste to other disposal sites becomes a key variable in market pricing. This transfer/hauling cost from Loudoun County to Fairfax County I-66 is estimated at \$6-\$8/ton. With Fairfax County charging \$40/ton for discounted contract waste, a total cost / ton is estimated at \$46-\$48 using the transfer option. Waste Management could dispose of the transfer waste more economically at its King George County landfill (about 90 miles from Loudoun). The estimated cost for this transfer/hauling/landfill option is estimated at \$43-\$46 / ton. Small private haulers indicate that the transfer station is charging \$50 / ton or more for disposal.

Three tipping fee options were analyzed for the revenue analysis:

- \$52 / ton to capture 10% of the market (Low Flow)
- \$50 / ton to capture 20% of the market (Medium Flow)
- \$47.50 / ton to capture 30% of the market (High Flow)

The table below shows the projected revenues under each tonnage/fee scenario. Within the first full year of tonnage increase, the total revenues under each option are as follows:

Table 4 – Projection of Revenues

Flow Scenario	Tip Fee / Ton	Estimated Revenues (1 st Full Year)
As Is	\$55.00	\$800,411
Low	\$52.00	\$1,377,653
Medium	\$50.00	\$2,083,852
High	\$47.50	\$2,700,885

A fifteen-year projection of estimated revenues under each scenario is presented in the Figure 1 chart. The projections assume no increase in tipping fees over the 15 year period even though there has been recent increases in Fairfax and other waste disposal fees. Tonnage and revenue increases are projected in all scenarios resulting from growth in Loudoun County population and employment (using Planning projections).

Figure 1

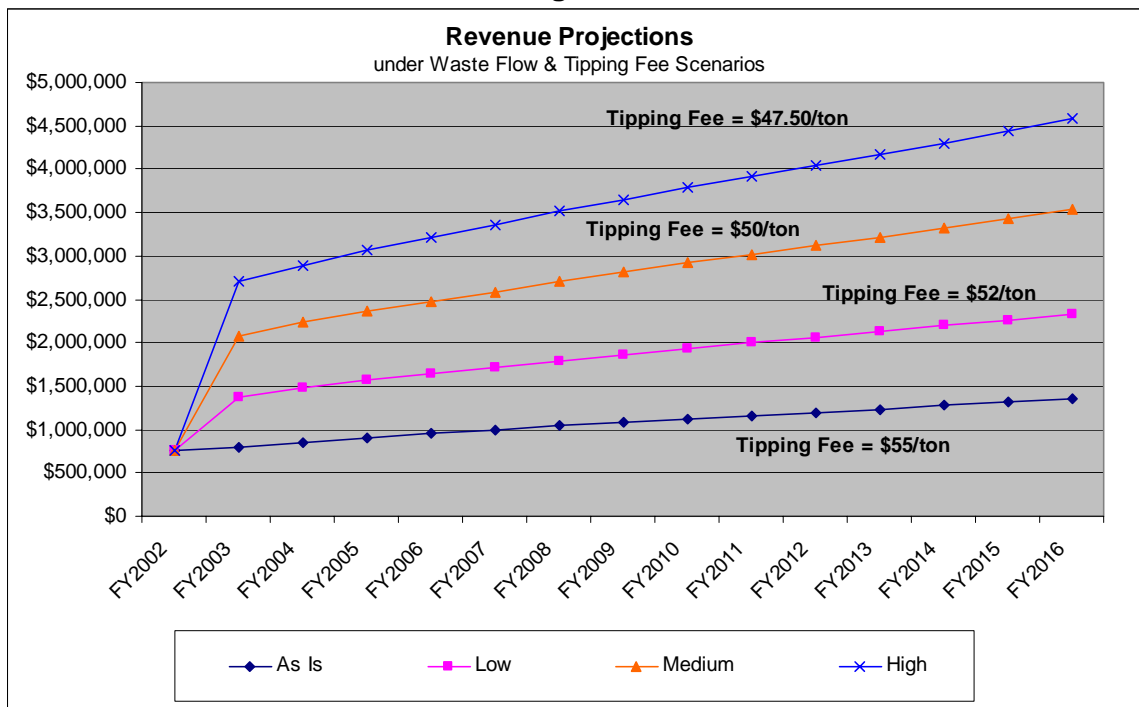


Figure 2 shows Net Revenues to/from the General Fund after accounting for tipping fee revenues and the costs of landfill operations, closure construction costs, and new cell construction costs. The charts in Figures 2 and 3 present the results of a “pay-as-you-go” analysis of net tipping revenues after paying for Landfill operations and capital costs associated with new cell construction and closure. The “net revenue” amounts shown represent the amount that must be made up from General Fund tax revenues (or in cases of surpluses, amounts available to pay other General Fund costs). As shown, over the 15 year projection period, the difference in net revenues between the High and As Is Scenarios may be significant.

Figure 2

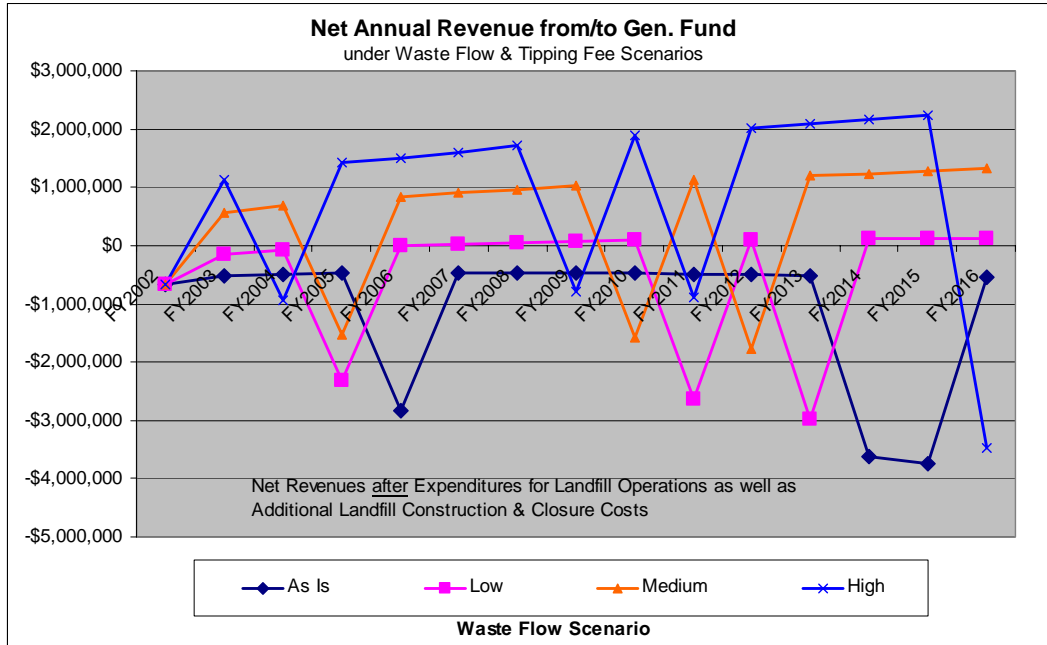
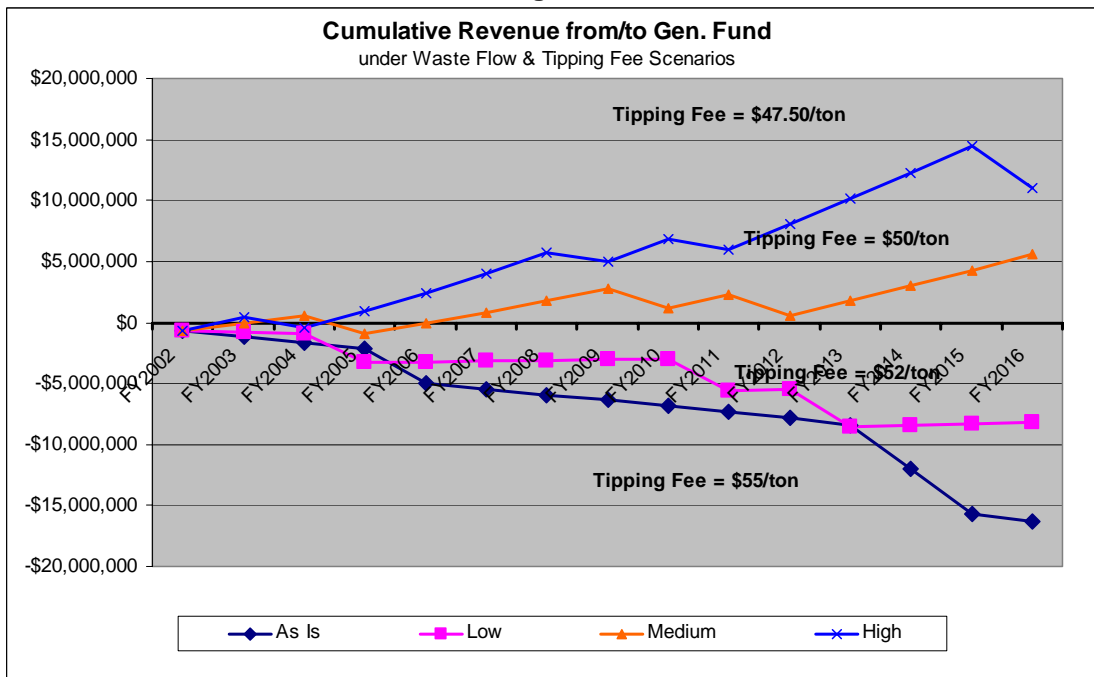


Figure 3



Operating costs are assumed based on existing budgets for Landfill Daily Operations plus estimated additional personnel, fuel and maintenance costs associated with high waste flow scenarios. The additional O&M costs assumed are:

Low Flow: \$200,000 / year
Medium Flow: \$200,000 / year
High Flow: \$250,000 / year

Additional construction and closure costs were also evaluated and projected for the different waste flow scenarios. A summary of the costs is as follows:

Table 5
Landfill Construction and Closure Cost Estimates

	Cell IIIB	Cell IIIC
CY Capacity	700,000	1,100,000
Construction Cost (\$2002)	\$2,100,000	\$2,100,000
	Sequ. 3	Sequ. 4
Closure Cost (\$2002)	\$2,175,000	\$3,600,000

Timing of cell and closure expenditures is influenced by the waste flow scenarios; the following are assumed:

- *As Is Scenario* – Construction of Cell IIIB in 2006; Closure of Sequence 3 in 2014
- *Low Flow Scenario* – Construction of Cell IIIB in 2005; Construction of Cell IIIC in 2011; Closure of Sequence 3 in 2013
- *Medium Flow Scenario* – Construction of Cell IIIB in 2005; Construction of Cell IIIC in 2010; Closure of Sequence 3 in 2012
- *High Flow Scenario* – Construction of Cell IIIB in 2004; Construction of Cell IIIC in 2009; Closure of Sequence 3 in 2011; Closure of Sequence 4 in 2016

Under the High Flow scenario additional expansion of the landfill would be required by 2016; however, since these estimates are not available at this time, the costs are not included in this analysis. Closure costs in 2004 related to Sequence II are also excluded since they are already budgeted for and are not influenced by any of the scenarios.

Mr. Richard S. Weber
Preliminary Tipping Fee Assessment
Proposal of Solid Waste Services, LLC (SWS)
LCSWMF—Permit No. 1
October 17, 2002; Page 9

We thank you for this opportunity and look forward to providing additional support as needed. Please call me or Mel Paret (703) 516-9220 if you have questions or need clarifications.

Sincerely,

Solid Waste Services, LLC.

Fouad K. Arbid, P.E.
Project Manager

Mel Paret
Senior Consultant

Ad Hoc Solid Waste Management Planning Committee
Item 5: Summary of Issues Positions
October 23, 2002

Solid Waste Management System Deficits

At the October 9 meeting of the Ad Hoc Solid Waste Management Planning Committee, the Committee discussed the second of three sets of solid waste management policy issues. Following discussion, the Committee cast straw votes on the options for each of six issues involving solid waste management system deficits. The following is a summary of the straw votes on these issues. The policy positions below are suggested as affirmations or modifications of the existing Solid Waste Management Strategy as described in this plan. Once these positions are confirmed, staff will incorporate them into the Implementation Plan (Chapter 6).

1. The Committee agreed to schedule a periodic review of facility capacity for handling MSW, CDD, and vegetative waste. The Committee also agreed to explore options for ensuring that facilities in Loudoun County give priority to solid waste generated in the County.
2. The Committee approved two options for waste reuse and exchange. These include identifying an NGO to conduct a resource availability and needs assessment of waste reuse and exchange. The Committee also was interested in identifying an NGO to establish a network of communication for waste reuse and exchange. The Committee expressed concern about competing against current NGO programs for reusable materials, and decided against a County-operated "Too Good To Waste" facility.
3. The Committee rejected the idea of creating solid waste service districts to ensure services for rural residents.
4. After agreeing that current CDD waste needs require attention from the LCSWMPD, the Committee decided to propose a regional CDD waste generation and characterization study to the Northern Virginia Regional Commission (NVRC) and/or the Metropolitan Washington Council of Governments (MWCOG). If the study is completed, the District will evaluate the need for further action in the County.

Pending further information and discussion, the Chair tabled the following issues:

1. The Committee tabled a decision on whether to recommend that the Board of Supervisors take action to help "level the playing field" of the local solid waste marketplace and to stimulate competition among service providers. The Committee requested that staff research information on the relationships between tipping fees, tonnages, capacity at the Landfill, and the debt service on the LCSWMF.

2. The Committee discussed providing economic incentives for rural haulers through reduced Landfill tipping fees. The Committee tabled action on this item and directed staff to work with the County Attorney's Office to assess the legality of a price differential.

Recycling Issues

At the September 25th meeting of the Ad Hoc Solid Waste Management Planning Committee, the Committee discussed the first of three sets of solid waste management policy issues—four recycling issues. The following is a summary of the straw votes on the recycling issues. Items 13 and 14 were added to this list as a result of discussions on October 9.

1. The Committee determined that full implementation of the recently adopted amendments to Chapters 1084 and 1086 of the Codified Ordinances of Loudoun County should be sufficient to sustain compliance with the State-mandated 25% recycling rate.
2. The incorporated Towns and the County agree on the value of standardized approaches to recycling. The Town representatives agree that adoption of Chapters 1084 and 1086 by the Town councils would be desirable, but are concerned about the financial impact. Staff was directed to provide the Committee supplemental information on the collection contract costs to the Towns of co-adoption of the County ordinances.
3. The Committee determined that a greater level of effort must be expended to promote recycling and educate the public on how to effectively recycle.
4. The Committee decided not to expand the current recycling effort to obtain higher recycling rates.
5. The Committee determined that the District should leave the recycling rate goal at 25%.
6. The Committee decided against setting specific recycling percentage targets for of any particular portion of the waste stream.
7. The Committee decided not to exclude yard waste from recycling calculations.
8. The Committee determined that the District should continue to use the State-authorized formula for calculating the recycling rate when setting goals and assessing results for recycling and for regulatory reporting.
9. The Committee determined that staff should formally monitor progress of the implementation of the ordinance amendments and report results to the District

membership on a regular basis. Such reports would include an assessment of any additional effort needed to comply with the State mandates.

10. Develop a recycling dropoff center plan for co-locating DOCs in a comprehensive countywide joint-use public facility plan for all major public facilities. Such locations would include parks, schools, fire stations, and other sites. These DOCs should be included in the planning and construction planning for all regional government sites
11. The Committee determined that a citizens group should be appointed at the conclusion of the SWMP process to identify options, assess viability, and recommend approaches and funding for response to any future increases in the mandated recycling rate.
12. The Committee wants to investigate the possibility of distributing information about County solid waste policies, especially recycling, via students in Loudoun County Public Schools.
13. The Committee recommended a capital improvement and funding schedule to construct and operate a DOC for immediate need in the Purcellville area, which replaces three sites lost in 1995. The Committee recommended the continued maintenance of all existing sites, too.
14. The Committee decided against developing a capital improvement and funding schedule to fully implement the County's current recycling policy, in light of budget conditions.

Ad Hoc Solid Waste Management Planning Committee
Item 6: Continuation of Staff Presentation of Solid Waste System Issues and
Options for Consideration by the Ad Hoc Planning Committee
October 23, 2002

Background:

This item presents to the Ad Hoc SWMP Committee the remaining set of issues in a series of three sets. These issues have been identified in earlier materials distributed to the Ad Hoc SWMP Committee. There are three general topics, previously identified by Chairman Kurtz: Recycling Issues, Solid Waste Management System Deficits, and Emergent Trends in solid waste.

The Committee discussed the recycling issues on September 25, and solid waste system deficits on October 9. Due to time constraints at the two previous meetings, the Committee has not discussed the issues on Emergent Trends. The issues being discussed in this item were distributed as item 5C in the packet for the September 25th meeting. Staff will have additional copies of these issues.

Emergent Trends

This item (**Item 5C from the 9-25-02 packet**) describes emergent trends in the current solid waste management system and presents several options for consideration.

1. Should Consistency Between the Zoning Ordinance and the Solid Waste Ordinances with Regard to Solid Waste Related Matters Be a Priority?
2. What Are Some Options for Handling Increasing Types and Amounts of Special Wastes?
3. What Can the LCSWMPD Do to Ensure an Adequate Response to Solid Waste/Debris Disasters?
4. Does the County Want to Regulate Unauthorized Dumping of Waste Dirt and/or the Accumulation of Waste Dirt in Large Surface Piles by Businesses that Accept Dirt for a Fee?
5. Does the Board Want to Prohibit Burning of Solid Waste by Residents?
6. What are some Information Deficits in the Solid Waste Management System?
7. What Opportunities Exist for the County and the Seven Incorporated Towns to Partner to Achieve and Sustain Effective Solid Waste Management?

Related Document:

Item 5C: Emergent Trends September 25, 2002

AGENDA
Loudoun County Ad Hoc Solid Waste Management Planning Committee
Wednesday, November 20, 2002 6:00 PM
Aspen Room, 906 Trailview Blvd. SE, Leesburg

1. Welcome—Supervisor Sally Kurtz, Chair
2. Meeting Summary from October 23, 2002
3. Wrap-up of questions/issues
 - A. Actions for Revenue-Neutral Landfill Operations
 - B. RFP for Public-Private Partnership Recycling Transfer Station at the Landfill
 - C. Incentives for Minor Haulers
 - D. Regulations on Burning Yard Waste
 - E. Zoning Ordinance and Chapter 1080 Conformance Issues
4. Issues Summary
5. Final Review of Draft LCSWMP Chapters 1-4 and 7
6. Presentation of Draft LCSWMP Chapter 5: Goals and Objectives
7. Presentation of Draft LCSWMP Chapter 6: Implementation Plan
8. Presentation of Draft LCSWMP Chapter 8: Description of Public Process

**Loudoun County Ad Hoc Solid Waste Management Planning Committee
Item 3A: Analysis of Tipping Fees and Capacity Consumption at the LCSWMF
November 20, 2002**

Background:

On October 23, the Committee was provided information describing the impacts on operations and capital construction budgets, revenues, disposal capacity consumption rates, and impact on local tax funding that would potentially occur as a result of reducing tipping fees at the County Solid Waste Management Facility. After a lengthy discussion, the Committee forwarded the issue to the next regular meeting for action. Chairman Kurtz requested a chart showing the relationships between each of the four scenarios with respect to funding and capacity consumption.

Discussion:

The County's solid waste engineering consultant, Solid Waste Services, LLC (SWS), conducted the assessment and prepared a written report of findings. The SWS report assessed four tipping fee scenarios including maintenance of the existing tipping fee. The Committee is attempting to balance the generation of sufficient revenues to cover the facility capital and operations costs, while not significantly accelerating consumption of permitted disposal capacity.

In summary, SWS reports that any of the scenarios that reduce the tipping fee will result in a reduction of the cumulative burden on local tax dollars that occurs from maintaining the status quo. The assessment indicates that the County could choose any of the three scenarios that reduce the tipping fee and reduce the burden on local tax funding; additionally, the County could cover some or all of the capital construction costs of new cells and closure projects. In each of the three scenarios, the County would remain a minor player in the provision of solid waste disposal services and would conserve future disposal capacity. At reductions to \$47.50 to 50.00 per ton, the goal of revenue neutrality is met, and the in-kind services provided through fee waivers act as a contribution towards old debt service for land purchase.

The chart requested by Chairman Kurtz is included as **Attachment 1** to this item. Ben Mays, Budget Officer, and Paul Arnett, Comptroller, will be available at the meeting to answer any questions that the Committee members might have.

Next Step:

Should the Committee wish to pursue this matter further, staff recommends that they consider making two recommendations as follows:

- 1) The Committee recommends that the Board of Supervisors amend their Operating Policy for the County Solid Waste Management Facility as follows.

Delete the current policy statement on level of facility operations:

The Landfill will operate as public service and will not seek to compete for waste. As such, it provides important option / alternative to prevent the County from relying on sole source providers of solid waste services.

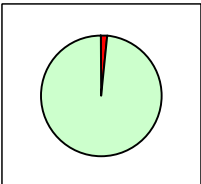
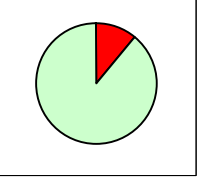
Add a revised operations level statement as follows:

The County Solid Waste Management Facility will operate six days a week (M-S) to provide an important solid waste management and disposal option to prevent the County, residents, and businesses from relying on sole source providers of solid waste services. The County Administrator is charged with achieving a workable balance between conservation of permitted disposal capacity, and revenue neutrality among tipping fee revenue, operations costs, and capital construction costs.

- 2) The Committee recommends that the Board of Supervisors direct the County Administrator to develop and implement a plan consistent with the guidelines in **Attachment 2**. The guidelines pose the dual objectives of making County Landfill disposal operations revenue neutral while not significantly accelerating consumption of permitted disposal capacity. In implementing this directive, the County Administrator is authorized to consider reductions in the tipping fee for municipal solid waste (MSW) to \$47.00 per ton for permitted major haulers under contract with the County and for all permitted minor haulers. The implementation plan identified in the guidelines would address the fee sensitivity issue and develop trip or upset limits that if met, would require adjustment. The Committee recommends a sliding scale of fee authorization from the Board to the County Administrator to provide flexible response time in a dynamic solid waste market.

Attachment 1: Graphical Representation of Landfill Tipping Fees Analysis
Attachment 2: Guidelines for Tipping Fee Changes to Achieve Revenue Neutral Operations

Loudoun County Ad Hoc Solid Waste Management Planning Committee
Item 3A, Attachment 1
Graphical Representation of Landfill Tipping Fees Analysis
November 20, 2002

	FY 2003	FY 2007	FY 2012	FY 2017
AS-IS FLOW \$55 / ton				
Cumulative to/from Gen. Fund	(\$1,189,778)	(\$5,453,317)	(\$7,857,614)	(\$16,841,585)
Cumulative LF Capacity Consumed	< 1% consumption	2% consumption	4% consumption	6% consumption
LOW FLOW \$52 / ton				
Cumulative to/from Gen. Fund	(\$812,536)	(\$3,194,510)	(\$5,526,560)	(\$8,014,790)
Cumulative LF Capacity Consumed	< 1% consumption	2% consumption	5% consumption	7% consumption
MEDIUM FLOW \$50 / ton				
Cumulative to/from Gen. Fund	(\$106,337)	\$783,735	\$554,953	\$6,973,764
Cumulative LF Capacity Consumed	< 1% consumption	3% consumption	5% consumption	9% consumption
HIGH FLOW \$47.50 / ton				
Cumulative to/from Gen. Fund	\$460,696	\$4,061,064	\$8,009,096	\$13,367,152
Cumulative LF Capacity Consumed	1% consumption	3% consumption	7% consumption	11% consumption

Loudoun County Ad Hoc Solid Waste Management Planning Committee
Item 3A, Attachment 2
Guidelines for Tipping Fee Changes to Achieve Revenue Neutral Operations
November 20, 2002

The following guidelines are established for considering tipping fee reductions at the County Solid Waste Management Facility. The dual objectives of such reductions are 1) to make County Landfill disposal operations revenue neutral, and 2) to avoid accelerating consumption of permitted disposal capacity. To achieve a balance between the two goals, several parameters are suggested for consideration:

- 1) The Office of Solid Waste Management shall develop an implementation plan subject to the approval of the County Administrator that will ensure that both objectives remain balanced. This plan would contain action steps should undesired events or actions occur as a result of the reduction of tipping fees.
- 2) All per ton fees will be in whole dollar amounts.
- 3) The tipping fee for customers other than County permitted haulers remains at \$55.00 per ton for all weighed waste including MSW.
- 4) There will be a minimum transaction fee of \$2.00 established for all transactions at the facility.
- 5) The fee for non-compacting rolloff containers, dump trucks, and demo trailers transporting construction and demolition waste will remain stay at \$55 per ton of waste. These types of vehicles are used extensively to haul construction and debris waste that is bulky and fills disposal space much faster than MSW.
- 6) The facility would reopen on Mondays, and 5 additional positions (FTEs) are authorized. These costs are included in the financial analysis.
- 7) Minor haulers holding valid County issued collection permits would be offered a tipping fee of \$47 per ton of MSW only and would not be required to contract with the County.
- 8) Major haulers holding valid County issued collection permits would be offered a tipping fee of \$47-52 per ton of MSW only and would be required to enter into a put or pay contract with the County that would limit the amount of waste that could be brought to the facility at that rate.
- 9) All tipping fee revenues above annual operating costs would be placed in a dedicated non-reverting fund and reserved to offset future capital construction costs.

**Loudoun County Ad Hoc Solid Waste Management Planning Committee
Item 3B: Response to Request for Information Regarding a Public-Private
Partnership Recycling Depot at the Loudoun County Landfill
November 20, 2002**

Background

During the October 23 meeting, the Ad Hoc SWMP Committee discussed the use of a public-private partnership to develop a centrally located recyclables depot or transfer station at the Loudoun County Solid Waste Management Facility (LCSWMF). The Committee directed staff to provide additional information on the details of how such a project would work at the next meeting.

Discussion

OSWM staff has expanded upon the general description of a potential Public-Private Partnership and provided more detail, similar in nature to that of a Request for Proposal (RFP). This information is in **Attachment 1** to this item. More specific elements of the potential recycling transfer station are described, including physical plant and operations requirements.

Options

1. Do not recommend that the Board of Supervisors pursue the public-private partnership recycling facility at this time.
2. Identify this matter for future consideration in the Solid Waste Management Plan.
3. Recommend that the Board of Supervisors direct staff to prepare and issue an RFP by July 1, 2003, consistent with Attachment 1 and the Public-Private Education Facilities and Infrastructure Act of 2002 once implemented by the Board.

Attachment: Response to Request for Information Regarding a Public-Private Partnership Recycling Depot at the Loudoun County Landfill.

Loudoun County Ad Hoc Solid Waste Management Planning Committee
Item 3B, Attachment 1
Response to Request for Information Regarding a Public-Private
Partnership Recycling Depot at the Loudoun County Landfill

Scope of Work

Loudoun County seeks a public-private partnership to design, permit, construct, and operate a transfer facility for source-separated recyclables. The facility will be located on County property at the Loudoun County Solid Waste Management Facility (LCSWMF).

Purpose

The purpose of this Public-Private Partnership is to increase recycling rates in the County by providing a centrally located site for recycling haulers and institutions.

Nature of the Partnership

- The partnership provides a low-risk site to the private partner while avoiding additional costs for the County, provides a recycling depot for haulers and institutions with reduced tipping fees, and minimizes direct expenditures by the County.
- The private partner shall pay quarterly rent to the County sufficient to support the salary, benefits, and other direct costs for one Specialist III employee, who will serve as liaison to the partnership and as the contract manager.
- The County of Loudoun shall take ownership of the facility upon completion of the contract. Offerors will propose a length of time for the term of the contract, and the length of time shall be assessed as part of the evaluation of proposals.

Design

- The cost of developing plans and complying with the design parameters will be borne solely by the private partner.
- The design of the facility must meet all Loudoun County site planning and zoning ordinance requirements, in addition to any and all applicable regulations or requirements imposed by the Commonwealth of Virginia, the Department of Environmental Quality, or Federal law.
- The facility shall include a metal-frame, fully enclosed structure with concrete or other impervious material floor, capable of receiving source-separated recyclable materials for the specific purpose of transferal of such material to material recovery facilities (MRFs) for processing.

- The facility shall include access to a truck scale for weighing trucks upon entrance and before exit, for the purposes of tonnage reporting and fee assessment. If the bidder can propose a practical way to use the current LCSWMF scales, such use shall be sufficient; otherwise, the facility must feature its own scale.
- The facility will allow sufficient truck turning radii and adequate delivery staging area to accommodate traffic flow, and an access road from the structure to the public road.
- The facility site must be completely enclosed by a fence not less than eight feet in height, of a type that will contain litter, dust, and noise within the facility site to the greatest extent possible.
- The facility operator is responsible for providing adequate site security, which shall include the prevention of illegal dumping at the facility and any other unlawful activity.

Permitting

- All permitting costs shall be borne solely by the private partner.
- The private partner will share responsibility with the Office of Solid Waste Management for obtaining and maintaining any and all operating, building, and occupancy permits required by County Ordinance and the Commonwealth of Virginia. The private partner will be solely responsible for obtaining, maintaining, and fulfilling any obligations for business licenses or taxes.
- This partnership shall not impose negative impacts on the Virginia Solid Waste Management Facility Permit held by the County.

Construction

- All construction costs shall be the responsibility of the private partner, including design, materials, labor, equipment, and security.
- The private partner is responsible for ensuring that all construction meets industry standards and any local, state, and federal regulations and requirements. The private partner assumes same responsibility for any subcontracted construction.
- From the time of award, the private partner shall have ninety days to apply for all required permits. Construction must be completed within 12 months of contract award unless the delays are the fault of the County or another government agency.

Operation

- The private partner shall be solely responsible for the operations of the facility.
- The private partner shall supply all labor and equipment necessary to perform all operations of the transfer facility.
- The facility shall operate in a manner that minimizes dust, litter, noise, odors, and potential public health nuisances, and in accordance with all ordinances and safety laws.
- The facility shall adhere to the operating schedule contained in the Special Exception for the County Solid Waste Management Facility (SPEX 1990-0025, and SPEX 1992-0027).
- The facility shall accept for transfer and recycling all recyclable materials in accordance with Chapter 1086, "Solid Waste Reduction and Recycling," of the Codified Ordinances of Loudoun County.
- The facility shall receive recyclable materials from waste haulers, institutions, and government entities only.
- The facility shall accept only materials that have been source-separated and collected for the purpose of recycling. The facility shall not accept MSW or any materials that were not collected to be recycled.
- The private partner must agree to accept a maximum contamination level of 5% for all materials.
- The private partner shall be responsible for all materials received, including any illegal dumping. All materials shall be contained inside the facility structure until time of export and shall be contained in compliance with all local zoning requirements and solid waste ordinances at all times.
- The private partner shall be responsible for transferring received materials to an appropriate processing facility or market for the purpose of recycling. The private partner shall assume same responsibility for any subcontracted transfer services.
- Any material received by the facility must be transferred out within 2 operating days, as defined herein.

Fee Structure

- The applicant shall propose a tipping fee model or schedule for accepting recyclable materials at the facility. The tipping fee shall be a flat per-ton, per-material rate. All customers shall pay the same tipping fee.
- The tipping fee at the recycling facility shall not exceed the tipping fee for MSW at the Loudoun County sanitary landfill at that time.
- The County shall not be responsible for any costs associated with facility operations.

**Loudoun County Ad Hoc Solid Waste Management Planning Committee
Item 3C: Incentives to Sustain Rural Solid Waste Collection Services
November 20, 2002**

Background:

At the October 9 meeting, the Committee discussed elements of the solid waste system having current or pending service deficits. One of these elements is rural solid waste collection service providers. This element includes solid waste collectors serving more sparsely populated areas of both eastern and western Loudoun County. These locations are specialized service areas that do not fit into the large collection companies' business plans due to low customer density, narrow roads, low weight limit bridges, and long driveways. The Committee expressed a desire to provide some type of incentive to help retain existing service providers and to encourage entry of new service providers. The Committee requested staff to confer with the County Attorney as to the legality of offering such incentives, including reduced tipping fees at the County's Solid Waste Management Facility.

Discussion:

The County Attorney does not view the proposal as posing a legal problem. Va. Code § 15.2-931 gives localities general authority to provide and operate solid waste management facilities and "charge and collect compensation for such services." There is no specific prohibition on differential rate structures based on volume. Further, the proposal to discount fees for small volume haulers, using the definition of "minor collector," is intended to promote the public health, safety and welfare by encouraging pickup service in sparsely settled areas. This public purpose is based on the finding by the Office of Solid Waste Management and the discussion by the Ad Hoc Committee that such areas must rely primarily on the small haulers and are not generally served by the large collection companies.

Options:

- 1) Make no further recommendations at this time regarding incentives for sustaining rural collection services and schedule this matter for a revisit in the initial biannual review of the Solid Waste Management Plan.
- 2) Recommend that the Board of Supervisors pursue Option 3 should the Board not accept the recommendation regarding the reduction of tipping fees.
- 3) Recommend that the Board of Supervisors adopt a reduced tipping fee for Minor Collectors as defined in Chapter 1084 of the Codified Ordinances of Loudoun County, provided that they hold a County permit in good standing. This reduced tipping fee would not be available to Minor Collectors operating under contract to a Major Collector, as defined in Chapter 1084.

Ad Hoc Solid Waste Management Planning Committee Item 3D: Regulations on Open Burning of Yard Waste November 20, 2002

Background

At the October 23 meeting, the Committee directed staff to provide additional information on state regulations regarding open burning of yard waste. Presented here is a summary of state regulations, current Loudoun County regulations, and possible options for the District. As the Committee decided previously to recommend the amendment of Chapter 1080 to disallow open burning of MSW, regulations related specifically to burning MSW have been omitted here.

Summary of State Regulations

9VAC5-40-5641, “Local ordinances on open burning.” The provisions of a local ordinance must be as strict as state regulations, except as provided for leaf burning in §10.1-1308 of the Virginia Air Pollution Control Law (*“No such regulation, [promulgated by the Commonwealth,] shall prohibit the burning of leaves from trees by persons on property where they reside if the local governing body of the county, city or town has enacted an otherwise valid ordinance regulating such burning.”*). Local ordinances are a supplement to state regulations. Any provisions of local ordinances which have been approved by the State Air Pollution Control Board and are more strict than state regulations take precedence over state regulations within the respective locality. If the governing body of any locality wishes to adopt an ordinance governing open burning within its jurisdiction, the ordinance must first be approved by the State Air Pollution Control Board (see §10.1-1321B of the Code of Virginia). If a local government wishes to adopt the language of the model ordinance provided in 9VAC5-40-5641 without changing any wording except that enclosed by parentheses, that government's ordinance shall be deemed to be approved by the State Air Pollution Control Board on the date of local adoption. If a locality fails to enforce its own ordinance, the State Air Pollution Control Board reserves the right to enforce state regulations.

9VAC5-40-5630 permits certain open burning.

- for the disposal of leaves and tree, yard and garden trimmings;
- for certain forest management and agriculture practices (see 9VAC5-40-5631).

Conditions exist for this permitted burning. All open burning activities must meet the following conditions, referenced in 9VAC5-40-5630 and itemized in 9VAC5-40-5620:

1. No disposal of rubber tires, asphaltic materials, crankcase oil, impregnated wood or other rubber or petroleum based materials except when conducting bona fide fire fighting instruction at fire fighting training schools having permanent facilities.
2. No disposal of hazardous waste or containers for such materials.
3. No salvage operations or for the disposal of commercial/industrial waste.

4. Permission for open burning or the use of special incineration devices permitted in this article does not exempt or excuse any owner or other person from liability related to the burning or from complying with any other laws or governmental entities have jurisdiction. In this regard special attention should be directed to §10.1-1142 of the Code of Virginia, which is enforced by the Department of Forestry.
5. With regard to the provisions of condition #4 (listed above), special attention should also be directed to the regulations of the Virginia Waste Management Board. No disposal of waste by open burning or transportation of waste to be disposed of by open burning shall take place in violation of the regulations of the Virginia Waste Management Board.

Additional requirements for specific types of open burning, 9VAC5-40-5630.

For leaves:

In urban areas, open burning is permitted for the disposal of leaves and tree, yard and garden trimmings located on the premises of private property, provided that no regularly scheduled public or private collection service for such trimmings is available at the adjacent street or public road. An urban area is an area consisting of a core city with a population of 50,000 or more plus any surrounding localities with a population density of 80 persons per square mile AND designated as such in **9VAC5-20-201**. Loudoun County IS designated as part of the National Capital Urban Area in 9VAC5-20-201.

For forest management and agriculture practices:

- a. The burning shall be at least 1000 feet from any occupied building unless the occupants have given prior permission, other than a building located on the property on which the burning is conducted.
- b. The burning shall be attended at all times.

There are seven agricultural practices for which open burning may be used (listed in **9VAC5-40-5631**):

1. To destroy undesirable vegetation.
2. To clear orchards and orchard prunings.
3. To destroy fertilizer and chemical containers.
4. To denature seed and grain which may no longer be suitable for agricultural purposes.
5. To prevent loss from frost or freeze damage.
6. To create a favorable habitat for certain species.
7. To destroy strings and plastic ground cover remaining in the field after being used in growing staked tomatoes.

Air Pollution Emergency in a Nonattainment Area. Loudoun County is located within the Northern Virginia Ozone Nonattainment Area (defined in **9 VAC 5-20-204**) which causes **9VAC5-70-10 et seq** to apply to Loudoun. Accordingly, if there is a declaration of an Alert, Warning, or Emergency Stage of an Air Pollution Episode or if the State Air Pollution Control Board finds there is a hazard to or unreasonable burden upon public

health or welfare, then no owner or other person shall cause or permit open burning or use of a special incineration device. Any in-process burning or use of special incineration devices shall be immediately terminated in the threatened Air Quality Control Region.

Seasonal bans on burning: The State Fire Marshal's Office bans open burning completely from June 1 through August 31 of each year. Open burning is restricted to the hours of 4 pm to midnight from February 15 through April 30.

Current Loudoun County Regulations

Loudoun County has adopted the Virginia Statewide Fire Prevention Code (VSFPC). In December 2000, Virginia Attorney General Jerry Kilgore opined that jurisdictions that have opted to enforce the Fire Prevention Code pursuant to the Virginia Statewide Fire Prevention Code Act (Code of Virginia, Chapter 9 of Title 27, §§ 27-94 through 27-101) may not selectively enforce the open burning regulations promulgated pursuant to the Code on a geographic basis.

The Loudoun County Fire Marshal's Office publicizes general open burning regulations. These require open burning of "brush, leaves, and house trash" take place 50 feet from any structure and that the burner notify the Marshal's office of the burn. Farmers are allowed to burn brush "on top of ground and in a fence-row." Burning to dispose of land clearing debris requires a permit from the Marshal's office and must take place 1,000 feet from any structure. No open burning is permitted in the Town of Leesburg.

Summary

There are currently many regulations in place regarding open burning: state clean air regulations, state and local fire prevention codes, etc. Some actions that are permissible by the State regulations are in direct violation of Loudoun County solid waste ordinances—e.g., burning fertilizer containers is an approved agricultural practice, but one who burns these plastic containers violates local recycling ordinances. An open burning amendment to Chapter 1080 would require approval by the State Air Pollution Control Board. The current solid waste management planning timeframe cannot accommodate such actions.

Options

1. No further modifications to the Solid Waste Ordinances—leave this matter to current regulations and at the discretion of the Fire Marshal.
2. In the Solid Waste Management Plan, schedule future review of this matter at the biennial review.
3. Amend Chapter 1080 to restrict open burning of vegetative waste—e.g., with regards to lot size, proximity of structures and people, etc.
4. Amend Chapter 1080 to prohibit open burning of vegetative waste.
5. An option devised by the Committee.

**Loudoun County Ad Hoc Solid Waste Management Planning Committee
Item 3E: Consistency between the Zoning Ordinance and Solid Waste Ordinances
November 20, 2002**

Background:

At the October 23 meeting, the Committee indicated that it wanted consistency between the Zoning Ordinance and the Solid Waste Ordinances with regard to solid waste terms and land uses. The Committee also stated that it wanted a modest set of regulations that would prohibit the unauthorized dumping of waste dirt, specify the size and acceptable locations for surface dirt piles, and recognize soil processing as a land use. The Committee directed staff to ensure that the Zoning Ordinance is reviewed and modified during this current revision process to ensure consistency with Chapter 1080 and establish standards for waste dirt piles and soil processing.

Discussion:

OSWM has confirmed with staff working on the Zoning Ordinance that the changes requested by the Committee cannot be accomplished at this time but may be addressed during Phase II of the revision process. Should the changes be addressed during the Phase II revision process, OSWM staff could concurrently prepare companion amendments to Chapter 1080. Staff suggests that the Committee recommend to the Board of Supervisors that the following list of items become a priority during Phase II of the Zoning Ordinance revision process:

- The Zoning Ordinance terms and definitions related to solid waste be modified to ensure consistency with Chapter 1080 and Virginia's solid waste regulations.
- The land uses in the Zoning Ordinance be reviewed and revised as necessary to ensure consistency with the types of solid waste facilities regulated under Chapter 1080.
- The Zoning Ordinance be amended to regulate surface piles of waste dirt (i.e., dirt landfills).
- The Zoning Ordinance be amended to regulated soil storage and processing.

Options:

- 1) Make no further recommendations at this time regarding consistency between the Zoning Ordinance and Solid Waste Ordinances.
- 2) Recommend that the Board of Supervisors make the aforementioned list of items a priority during Phase II of the Zoning Ordinance revision process.

**Ad Hoc Solid Waste Management Planning Committee
Item 4: Summary of Issues Positions
November 20, 2002**

Pending Issues

1. The Committee tabled a decision on whether to recommend that the Board of Supervisors take action to help “level the playing field” of the local solid waste marketplace and to stimulate competition among service providers. The Committee requested that staff research information on the relationships between tipping fees, tonnages, capacity at the Landfill, and the debt service on the LCSWMF.
2. The Committee discussed providing economic incentives for rural haulers through reduced Landfill tipping fees. The Committee tabled action on this item and directed staff to work with the County Attorney’s Office to assess the legality of a price differential.
3. The Chair tabled an option about amending Chapter 1080 to permit and restrict the burning of yard waste under certain conditions.

The following is a summary of the straw votes on issues. As the Committee has confirmed these positions, staff has incorporated them into the Implementation Plan (Chapter 6).

Emergent Trends (October 23)

1. The Committee believes that consistency between the Zoning Ordinance and the Solid Waste Management Facilities Ordinance with regard to solid waste is a clear priority. Considering the imminent revision of the Zoning Ordinance by the Board of Supervisors, the Committee directed staff to present specific issues and language for inclusion in the revision process as soon as possible.
2. The Committee agreed that more opportunities for residents to dispose of special wastes are needed. The Committee favored additional drop-off sites for oil and other special wastes. The Committee also recommended more frequent HHW collection events than are currently planned each year.
3. The Committee decided to seek pre-approval of emergency solid waste/debris site(s) from VADEQ, establish mutual aid agreements with other jurisdictions in Northern Virginia, and to recommend inclusion of solid waste management planning in the County’s emergency management plan.

4. The Committee recommends that the Board of Supervisors amend Chapter 1080 and the Zoning Ordinance to restrict unauthorized dumping of waste dirt, to regulate surface piles of waste dirt (i.e., "dirt landfills"), and to regulate soil processing. Considering the imminent revision of the Zoning Ordinance by the Board of Supervisors, the Committee directed staff to present specific issues and language for inclusion in the revision process as soon as possible.
5. The Committee recommended that the Board of Supervisors amend Chapter 1080 to specifically prohibit the burning of MSW in the County.
6. The Committee decided to plan for biennial review of the Solid Waste Management Plan by the LCSWMPD.
7. The Committee decided not to pursue any further policy or program options at this time.

Solid Waste Management System Deficits (October 9)

1. The Committee agreed to schedule a periodic review of facility capacity for handling MSW, CDD, and vegetative waste. The Committee also agreed to explore options for ensuring that facilities in Loudoun County give priority to solid waste generated in the County.
2. The Committee approved two options for waste reuse and exchange. These include identifying an NGO to conduct a resource availability and needs assessment of waste reuse and exchange. The Committee also was interested in identifying an NGO to establish a network of communication for waste reuse and exchange. The Committee expressed concern about competing against current NGO programs for reusable materials, and decided against a County-operated "Too Good To Waste" facility.
3. The Committee rejected the idea of creating solid waste service districts to ensure services for rural residents.
4. After agreeing that current CDD waste needs require attention from the LCSWMPD, the Committee decided to propose a regional CDD waste generation and characterization study to the Northern Virginia Regional Commission (NVRC) and/or the Metropolitan Washington Council of Governments (MWCOG). If the study is completed, the District will evaluate the need for further action in the County.

Recycling Issues (September 25)

1. The Committee determined that full implementation of the recently adopted amendments to Chapters 1084 and 1086 of the Codified Ordinances of

Loudoun County should be sufficient to sustain compliance with the State-mandated 25% recycling rate.

2. The incorporated Towns and the County agree on the value of standardized approaches to recycling. The Town representatives agree that adoption of Chapters 1084 and 1086 by the Town councils would be desirable, but are concerned about the financial impact. Staff was directed to provide the Committee supplemental information on the collection contract costs to the Towns of co-adoption of the County ordinances.
3. The Committee determined that a greater level of effort must be expended to promote recycling and educate the public on how to effectively recycle.
4. The Committee decided not to expand the current recycling effort to obtain higher recycling rates.
5. The Committee determined that the District should leave the recycling rate goal at 25%.
6. The Committee decided against setting specific recycling percentage targets for of any particular portion of the waste stream.
7. The Committee decided not to exclude yard waste from recycling calculations.
8. The Committee determined that the District should continue to use the State-authorized formula for calculating the recycling rate when setting goals and assessing results for recycling and for regulatory reporting.
9. The Committee determined that staff should formally monitor progress of the implementation of the ordinance amendments and report results to the District membership on a regular basis. Such reports would include an assessment of any additional effort needed to comply with the State mandates.
10. Develop a recycling dropoff center plan for co-locating DOCs in a comprehensive countywide joint-use public facility plan for all major public facilities. Such locations would include parks, schools, fire stations, and other sites. These DOCs should be included in the planning and construction planning for all regional government sites
11. The Committee determined that a citizens group should be appointed at the conclusion of the SWMP process to identify options, assess viability, and recommend approaches and funding for response to any future increases in the mandated recycling rate.

12. The Committee wants to investigate the possibility of distributing information about County solid waste policies, especially recycling, via students in Loudoun County Public Schools.
13. The Committee recommended a capital improvement and funding schedule to construct and operate a DOC for immediate need in the Purcellville area, which replaces three sites lost in 1995. The Committee recommended the continued maintenance of all existing sites, too.
14. The Committee decided against developing a capital improvement and funding schedule to fully implement the County's current recycling policy, in light of budget conditions.

**Loudoun County Ad Hoc Solid Waste Management Planning Committee
Item 5: Final Review of Chapters 1 through 4 and Chapter 7 of the SWMP
November 20, 2002**

Background:

The Committee was provided a draft of Chapters 1 through 4 of the future Solid Waste Management Plan for the Loudoun SWMP District at the initial meeting on September 11, 2002. Staff reviewed the material in the four chapters at that time. Draft Chapter 7 was presented to the Committee on September 25. The second half of Chapter 7, which addresses the funding of the proposed solid waste system, can not be written until the conclusion of the SWMP process. The purpose of this item is to solicit any final questions or corrections noted by Committee members on these draft chapters.

Discussion:

Staff is currently drafting the text of the Solid Waste Management Plan for the Loudoun Solid Waste Management Planning District. This document will support the public process, and will serve as the document of record that the Committee ultimately sends forward to the Board of Supervisors and respective Town Councils for adoption. The goal is to make any final corrections, and have the Committee approve it as the final recommended text.

Chapter 1 Corrections Noted and Status:

No revisions have been requested or made to this Chapter since original distribution.

Chapter 2 Corrections Noted and Status:

No revisions have been requested or made to this Chapter since original distribution.

Chapter 3 Corrections Noted and Status:

- 1) Page. 3-5: 3.2.8 Special Waste and Household Hazardous Collection: list an exact number of businesses operating in the County unknown -- doesn't State DEQ maintain listing and information on geographical service area? Special waste haulers must be permitted by DEQ and/or EPA; however, information on areas of operations is not available. 3.2.8 has been clarified.
- 2) p. 3-7: "located in nearby"-- finish sentence. The missing word jurisdictions has been added on this page.
- 3) p. 3-10: 3rd paragraph from bottom: sentence (insert _an_ between "provides" and "important." Page 3-10 so revised.

- 4) Pages 3-10 and 3-11. The Board of Supervisors modified the LCSWMF Operations Policy on October 21, 2002 to include FastTrash as a permanent program, and to standardize the tipping fees at \$55 per ton. The LCSWMF Operations Policy (on pages 3-10 and 3-11) has been revised consistent with the Board's action.

Please remove any previous versions of these pages only and replace them with the pages in Attachment 1.

Chapter 4 Corrections Noted and Status:

No revisions have been requested nor made to this Chapter since original distribution.

Chapter 5 Corrections Noted and Status:

This Chapter has not been distributed to date.

Chapter 6 Corrections Noted and Status:

This Chapter has not been distributed to date.

Chapter 7 Corrections Noted and Status:

No revisions have been requested nor made to this Chapter since original distribution.

Chapter 8 Corrections Noted and Status:

This Chapter has not been distributed to date.

Notes:

- Text for draft Chapters 5, 6, and 8 were initially distributed in the packet for the November 20, 2002 meeting and therefore were not considered in this item.
- Text for Chapter 3 will be edited again in the future because shortly before press the content of sections 3.3.2.1 and 3.4.2.2 was moved to Appendices A and B of the SWMP document.

Options:

- 1) The Committee has reviewed the referenced Chapters 1-4 and Chapter 7 and has no further revisions. They are ready for incorporation into the public review draft of the Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District with the proviso that modifications to address the funding strategy for the Implementation Plan will be required at some point in Chapter 7.
- 2) The Committee identifies additional revisions needed and directs staff on how to proceed.

Attachment 1: Replacement pages 3-5, 3-7, 3-10, and 3-11 (pages 3-5 to 3-12)

**Ad Hoc Solid Waste Management Planning Committee
Item 6: Draft Chapter 5 of the Solid Waste Management Plan
November 20, 2002**

Background:

On September 11, 2002, staff presented a draft of Chapters 1-4 of the Solid Waste Management Plan (SWMP) document. These Chapters described the solid waste management system in Loudoun County. On September 25, 2002, staff presented a draft of Chapter 7 of the SWMP document. This Chapter addressed financing and funding of the solid waste management system.

For the November 20 meeting, staff has prepared a draft of Chapter 5. Chapter 5 outlines specific objectives of the Solid Waste Management Plan.

Chapter 5: Objectives for the Solid Waste Management Plan

Attachment 1 is a draft of Chapter 5 text. This Chapter lists objectives for the District. The objectives submitted in the draft Chapter 5 are based on past solid waste management plans and current law or policy and are subject to change by the Committee.

Revised Table of Contents

Staff has prepared a revised Table of Contents to reflect the addition of new chapters, although the information conveyed as draft Chapter 5 is subject to considerable change. Please REMOVE any previous versions of pages v through ix of the Table of Contents and REPLACE them with **Attachment 2** of this document.

Completion of Chapter 5

Staff requests the Committee's concurrence that draft Chapter 5 represents the objectives for the Loudoun County Solid Waste Management Planning District, or direct staff on revisions required. Staff will use the draft version of Chapter 5 as revised by the Committee to develop a final version of the Objectives for the Public review draft of the SWMP document.

Attachment 1: Draft of Chapter 5 of the SWMP Document, "Objectives for the Solid Waste Management Plan"

Attachment 2: Draft of SWMP Document Table of Contents

**Ad Hoc Solid Waste Management Planning Committee
Item 7: Draft Chapter 6 of the Solid Waste Management Plan
November 20, 2002**

Background:

On September 11, 2002, staff presented a draft of Chapters 1-4 of the Solid Waste Management Plan (SWMP) document. These Chapters described the solid waste management system in Loudoun County. On September 25, 2002, staff presented a draft of Chapter 7 of the SWMP document. This Chapter addressed financing and funding of the solid waste management system. The current status of those chapters has been addressed in a prior item.

For the November 20 meeting, staff has prepared a draft of Chapter 6. Chapter 6 is an action plan for implementation of the Solid Waste Management Plan. Implementation of the Plan should result in the accomplishment of the objectives.

Chapter 6: Implementation of the Solid Waste Management Plan

Attachment 1 is a draft of Chapter 6 text. This Chapter lists action plan options for implementing the solid waste management plan in order to achieve the objectives in Chapter 5. The implementation plan contained in draft Chapter 6 is based on past solid waste management plans, and continuation of current system elements except as modified by Committee recommendations on the issues presented.

Completion of Chapter 6

Staff requests the Committee's concurrence that draft Chapter 6 represents the findings and recommendations of the Committee including the subject to the votes to modify the text through the

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|----------------------|--|
| Attachment 1: | Draft of Chapter 6 of the SWMP Document, "Implementation of the Solid Waste Management Plan" |
| Attachment 2: | Appendix A: Board of Supervisors Landfill Policy |
| Attachment 3: | Appendix B: Board of Supervisors Recycling Policy |

Attachment 2
Appendix A: Board of Supervisors Landfill Policy
Included in Appendix K of the SWMP

Attachment 3
Appendix B: Board of Supervisors Recycling Policy
Included in Appendix M of the SWMP

**Ad Hoc Solid Waste Management Planning Committee
Item 6: Draft Chapter 8 of the Solid Waste Management Plan
November 20, 2002**

Background:

On September 11, 2002, staff presented a draft of Chapters 1-4 of the Solid Waste Management Plan (SWMP) document. These Chapters described the solid waste management system in Loudoun County. On September 25, 2002, staff presented a draft of Chapter 7 of the SWMP document. This Chapter addressed financing and funding of the solid waste management system.

For the November 20 meeting, staff has prepared a draft of Chapter 8. Chapter 8 relates participation by the public in the revision of the Solid Waste Management Plan.

Chapter 8: Public Participation

Attachment 1 is a draft of Chapter 8 text. This Chapter relates participation by in the public in the revision of the Solid Waste Management Plan. The importance of actions by the Chair, the Committee, Town Representatives, and County staff to public input and transparency are identified. Events discussed are based upon correspondence, meeting agendas and summaries, and distributed meeting materials.

Completion of Chapter 8

Staff requests the Committee's concurrence that draft Chapter 8 represents the actuality of public participation in the revision of the Solid Waste Management Plan, or direct staff on revisions required. Staff will use the draft version of Chapter 8 as revised by the Committee to develop a final version of the Objectives for the Public review draft of the SWMP document.

Attachment 1: Draft of Chapter 8 of the SWMP Document, "Public Participation."

**SOLID WASTE MANAGEMENT PLAN
PUBLIC PROCESS MEETING
Wednesday, January 8, 2003
6:00 – 9:00 p.m.**

Opening Remarks

Welcome and Overview by Chairwoman Sally Kurtz6:00-6:10
Explanation of Process by Dick McCaffery6:10-6:25

Collection

Presentation by Randy Reed6:25-6:30
Group Discussion Led by Facilitators (incl. intros of participants)....6:30-6:50

Disposal

Presentation by Mike Fairbanks6:50-6:55
Group Discussion Led by Facilitators.....6:55-7:15

Recycling and Reuse

Presentation by Tony Hayes7:15-7:20
Group Discussion Led by Facilitators.....7:20-7:40

Environmental Protection

Presentation by Monica Gorman.....7:40-7:45
Group Discussion Led by Facilitators.....7:45-7:55

Planning and Public Information

Presentation by Teri Jackson.....7:55-8:00
Group Discussion Led by Facilitators.....8:00-8:10

Closing Remarks

Issues Summary by Committee Members8:10-8:55
Thank you and closing remarks by Chairwoman Sally Kurtz8:55-9:00



Loudoun County, Virginia

www.loudoun.gov

Board of Supervisors

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January 8, 2003

Dear Participant:

In August 2001, the Virginia Department of Environmental Quality required that every city, county, and town in Virginia submit a completely revised Solid Waste Management Plan (SWMP) by July 2004. The Plan has a twenty-year planning horizon.

An Ad Hoc Solid Waste Management Planning Committee, composed of Town representatives and three members of the Board of Supervisors, has been reviewing the Plan for the past two months. You have been identified as a key person who might be interested in the proposals generated. On January 8, 2002, a public worksession will take place at 6:00 p.m. in the Aspen Room at 906 Trailview Boulevard in Leesburg. The purpose of this meeting is twofold:

- To inform government, industry and citizen group representatives about the key elements of the Solid Waste Management Plan before submitting it to the Board of Supervisors for approval.
- To provide an opportunity to react to these proposals before finalization and to propose additions, deletions or changes for the Ad Hoc Committee's consideration.

The normal public process, including a Public Hearing in early 2003, will take place after the Ad Hoc SWMP Committee sends the Plan to the full Board of Supervisors. This January session is a special opportunity to work in small groups to build a common understanding of the recommendations and to gain your input before submission.

Attached to this letter is an executive summary of the work of the Committee. A series of statements summarizing the plan elements will be the topic of discussion on January 8. I hope that you will attend this meeting, review the Committee recommendations, and discuss with others any elements you might find lacking or support for any items of which you especially approve.

Sincerely,

Sally R. Kurtz, Ad Hoc Solid Waste Management Planning Committee Chairman

Attachment (1) Executive Summary dated December 11, 2002 (0211-086a)

0301-001

Scott K. York, Chairman At-Large

Eleanore C. Towe
Blue Ridge District

Sally R. Kurtz
Catoclin District

Mark R. Herring
Leesburg District

Eugene A. Delgaudio
Sterling District

Chuck Harris
Broad Run District

J. Drew Hiatt
Dulles District

Jim Burton
Mercer District

William Bogard
Sugarland Run District

EXECUTIVE SUMMARY
AD HOC SOLID WASTE MANAGEMENT PLANNING COMMITTEE
LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING DISTRICT
DECEMBER 11, 2002

Planning for solid waste management is a local responsibility. Under State law and regulations, localities are given authority to conduct solid waste management planning through a planning district recognized by the State Department of Environmental Quality (DEQ). The plan must address how the District will manage its solid waste for the next twenty years; how the District will meet a state-mandated recycling rate of 25%; and how the District's plan adheres to a solid waste management hierarchy that places source reduction, reuse and recycling above solid waste disposal methods of waste-to-energy, incineration and landfilling.

Upon adoption of this Plan, the Loudoun County Solid Waste Management Planning District will include the seven Loudoun incorporated towns of Hamilton, Hillsboro, Leesburg, Lovettsville, Middleburg, Purcellville, and Round Hill and the remainder of unincorporated Loudoun County. The District's current plan was developed by the 1994-95 Solid Waste Citizens' Planning Committee and submitted to DEQ for a July 1997 deadline. In July 2002, the Loudoun County Board of Supervisors appointed a special Board Committee, which invited representatives from each of the seven Loudoun towns, forming the Ad Hoc Solid Waste Management Planning Committee. The Committee was charged with drafting a revised Solid Waste Management Plan as required by new State regulations that became effective in 2001. The Committee was charged with returning a draft document to the District member Towns and County by the end of Calendar Year 2003 in time for a July 2004 DEQ submittal deadline.

Since September 2002, the Committee has met and received information regarding the District's solid waste management system including waste amounts and types, and the system's elements for collecting, transporting, transferring, and disposing of solid waste. The Committee has deliberated and taken votes upon a series of policy issues and options, and has received written and verbal comments from citizens and solid waste industry representatives. The Committee has developed a series of recommendations for sustaining the current system's components, steps for immediate action, actions that should occur or be reviewed during the life of the plan, and a process for regular reporting and review of the plan's status and ongoing effectiveness.

The Committee has grouped its recommendations into five topical areas of collection, disposal, reuse and recycling, environmental, and planning and public information. For each area, the Committee is recommending those current activities that should be sustained, the action steps to be taken immediately, and actions that should be taken over a longer time period.

**Loudoun County
AdHoc Solid Waste Management Planning Committee Meeting
(LCSWMP)**

**With
Government, Industry and Community Representatives**

January 8, 2003

DISCUSSION QUESTIONS: Background

The Committee charged with reviewing and revising the District's Solid Waste Management Plan focused its efforts on five Categories:

**Collection
Environmental Protection
Planning and Public Information
Recycling and Reuse
Disposal**

Their proposed recommendations in each of these Categories fall into three areas:

**Continuation of Current Actions
Immediate Action Steps
Future Planning Efforts**

DISCUSSION QUESTIONS

- 1. As you review each Category, are any recommendations in need of clarification in terms of your understanding of what is meant?**
- 2. Do you have any comments, additions, changes, etc., to suggest to the Committee as they finalize their proposed recommendations?**

COMMUNITY NETWORKING: THE PROCESS

SETTING THE STAGE: ADHOC COMMITTEE (LCSWMP) STATE MEETING GOALS TO PARTICIPANTS.

IMPLEMENTATION: PARTICIPANTS MEET IN FACILITATED GROUPS TO DISCUSS WHAT HAS BEEN ASKED.

(ADHOC MEMBERS AND OTHER OBSERVERS DO NOT PARTICIPATE IN THE SMALL GROUP DISCUSSIONS. THEY ONLY LISTEN).

FEEDBACK: AT END OF THIS MEETING, OBSERVING ADHOC COMMITTEE MEMBERS ORALLY PRESENT HIGHLIGHTS OF SMALL GROUP DISCUSSIONS TO WHOLE GROUP

GROUP RECORDERS SUBMIT A WRITTEN SUMMARY OF PARTICIPANT DISCUSSIONS FOR COMMITTEE REVIEW.

FOLLOW-UP: ADHOC COMMITTEE REVIEW ALL SUGGESTIONS AND DECIDE ON ANY ADJUSTMENTS TO THEIR PROPOSED RECOMMENDATIONS (DEC. 18 MEETING).

FOLLOWING ADHOC COMMITTEE REVIEW, PARTICIPANTS WILL RECEIVE A SUMMARY OF TONIGHT'S SMALL GROUP DISCUSSION POINTS AND OF COMMITTEE ACTIONS RESULTING FROM DECEMBER 18.MEETING

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COMMUNITY NETWORKING: IMPLEMENTATION

=====

CONDUCTING THE DISCUSSION

- FACILITATOR:**
- Introduce group, including Staff Recorder and Technical Advisor.**
 - Ensure Sponsor's purpose is fulfilled., i.e., questions discussed.**
 - Give everyone an opportunity to participate.**
 - Do not let anyone monopolize the discussion.**
 - Have Staff Recorder review notes with group after each Category discussion. (Collection, Disposal, Recycling and Re-Use, Environmental, Planning and Public Information)**
 - Each discussion Category has three proposed recommendation areas: Policy Continuations, New Actions, Future Planning efforts. Address needed clarifications in each area before soliciting suggestions, comments, etc. from small group.**
 - Allow up to 20 minutes per Category. If you have time at end, you may return to an unfinished Category.**

=====

COMMUNITY NETWORKING: IMPLEMENTATION

=====

CONDUCTING THE DISCUSSION

RECORDER:

Record specific clarification requests on any proposed recommendation (Question 1).

Record any changes, additions or deletions suggested by small group participants (Question 2).

After each Category discussion, review your notes with group to ensure coverage of each requested clarification and adjustment suggestion.

Quantify points....(some, one, most, all agreed) to extent possible.

After Meeting, work with other Recorders to develop summary for presentation to SWMP Committee for their review.

Final edit your small group's comments for submission to LCSWMP Committee.

REPORTER:

Members of the LCSWMP Committee will circulate among small groups, as observers, during the discussions.

At end of Meeting, Committee members will highlight selected discussion points that caught their attention, presenting them to whole group.

**Loudoun County
AdHoc Solid Waste Management Planning Committee Meeting
(LCSWMP)**

December 11, 2002

Collection Discussion

Continuation of Current Actions

Immediate Action Steps

Future Planning Efforts (None proposed for Collection)

DISCUSSION QUESTIONS

- 1. As you review each Category, are any recommendations in need of clarification in terms of your understanding of what is meant?**
- 2. Do you have any comments, additions, changes, etc., to suggest to the Committee as they finalize their proposed recommendations?**

COLLECTION

STATUS QUO ELEMENTS

1. The Towns and the County (District members) will rely on private sector waste collection service providers for recycling and trash collection for residents and businesses.
2. Due to special collection requirements, the County will continue to collect its own solid waste and recyclables.
3. The County will permit and regulate collection service providers to ensure that minimum service levels are met, and that recycling services are provided. The Towns may elect to co-adopt some or all of the County ordinances regulating collection and may request that OSWM enforce these provisions.
4. The Towns will use contractual terms and conditions to ensure that minimum collection service levels are met in their jurisdictions.

IMMEDIATE ACTION INITIATIVES

5. The District members recommend that the Board of Supervisors revise the Landfill disposal rates to help sustain adequate solid waste collection services in rural areas.
6. OSWM will phase in the regulation and monitoring of CDD collectors as part of the implementation of Chapter 1084 to collect information on CDD generation and disposal.

FUTURE INITIATIVES

none

**Loudoun County
AdHoc Solid Waste Management Planning Committee Meeting
(LCSWMP)**

December 11, 2002

Disposal Discussion

Continuation of Current Actions

Immediate Action Steps

Future Planning Efforts

DISCUSSION QUESTIONS

- 1. As you review each Category, are any recommendations in need of clarification in terms of your understanding of what is meant?**
- 2. Do you have any comments, additions, changes, etc., to suggest to the Committee as they finalize their proposed recommendations?**

DISPOSAL

STATUS QUO ELEMENTS

1. The Towns and the County will rely on disposal in landfills (rather than incineration or some other method) as their primary solid waste management method and recycling as their secondary method.
2. The Towns and the County will rely on private solid waste transfer station facilities and out-of-District disposal facilities to provide the main disposal options.
3. The County will maintain its SWMF as a disposal option for solid wastes that are not desired or permitted at a private transfer facility, to provide emergency backup to the primary disposal option, and to provide a disposal option for residents and businesses who can not, or choose not, to obtain collection service.

IMMEDIATE ACTION INITIATIVES

4. The District members recommend that the Board of Supervisors amend the Landfill policy to promote a more revenue-neutral facility while conserving landfill capacity.
5. The District members will request that NVRC or MWCOG conduct a regional CDD waste generation and characterization study, to be completed by December 2004 to assess CDD disposal demand and supply.

FUTURE INITIATIVES

6. OSWM will complete construction plans and bid specifications for the next cell (IIIB) of the LCSWMF by the end of calendar year 2005 and begin its construction in 2006. A schedule for subsequent design and construction is dependent on disposal demand and will be monitored as part of the biennial audit.
7. Pending receipt of the information from the proposed CDD generation and disposal capacity study, the District will assess the need for further action or initiatives as appropriate for CDD.

**Loudoun County
AdHoc Solid Waste Management Planning Committee Meeting
(LCSWMP)**

December 11, 2002

Recycling and Reuse Discussion

Continuation of Current Actions

Immediate Action Steps

Future Planning Efforts

DISCUSSION QUESTIONS

- 1. As you review each Category, are any recommendations in need of clarification in terms of your understanding of what is meant?**
- 2. Do you have any comments, additions, changes, etc., to suggest to the Committee as they finalize their proposed recommendations?**

RECYCLING AND REUSE

STATUS QUO ELEMENTS

1. The County will implement recycling ordinance amendments to set the minimum standards requiring residents, business and haulers to ensure District compliance with the State mandated 25 percent recycling rate.
2. The incorporated Towns will continue their curbside recycling activities and any business waste and dropoff center services, where applicable.
3. The County will fund and operate eight centrally located dropoff centers (DOCs) to provide recycling opportunities to those with no curbside pickup. In addition, the Town of Leesburg will continue to fund and operate three DOCs of its own.
4. To set the example and promote recycling, the County will maintain its mixed paper recycling program in its offices and its price preference for procurement of recycled content paper.
5. The Towns and the County will support private sector vegetative waste processing and yard waste composting to enhance the District's recycling efforts.

IMMEDIATE ACTION INITIATIVES

6. The District members recommend that the Board of Supervisors develop a capital improvement and funding schedule to construct and operate a DOC in the Purcellville area, replacing three DOC sites lost in 1995.
7. The District members recommend that the Board of Supervisors pursue a recyclables transfer station—to be located at the LCSWMF and operated as a private/public partnership—to address the lack of recycling infrastructure.
8. The OSWM will work with the County Land Use Referral process to ensure that recycling area standards are set and use in new developments.

FUTURE INITIATIVES

9. The District members recommend that the Board of Supervisors revise the comprehensive county-wide joint-use public facilities plan to incorporate DOCs in all appropriate public facility sites.
10. The District members recommend that the Board of Supervisors pursue reuse options such as an internet-based waste exchange program by fiscal year 2005, subject to available funding.
11. The District shall convene a Citizens' Committee to consider action plans for execution in the event of increases to the mandatory recycling rate.
12. The County and Town members will work towards consistent requirements for recycling and solid waste management in order to enhance recycling for the entire District.

**Loudoun County
AdHoc Solid Waste Management Planning Committee Meeting
(LCSWMP)**

December 11, 2002

Environmental Protection Discussion

Continuation of Current Actions

Immediate Action Steps

Future Planning Efforts

DISCUSSION QUESTIONS

- 1. As you review each Category, are any recommendations in need of clarification in terms of your understanding of what is meant?**
- 2. Do you have any comments, additions, changes, etc., to suggest to the Committee as they finalize their proposed recommendations?**

ENVIRONMENTAL

STATUS QUO ELEMENTS

1. The County will operate and monitor environmental systems at the LCSWMF, pursuant to State regulations, to ensure protection of the environment.
2. The County will conduct seven Household Hazardous Waste (HHW) collection events to provide residents with a viable disposal option for potentially hazardous materials.
3. The County will fund the coordination and staging expense of business waste collection events to provide generators of hazardous materials an affordable option for disposal.
4. The County will respond to, investigate, and resolve dump complaints and provide fee waivers to support cleanup of roadsides, illegal dumps and farm dumps, when appropriate. The Towns may adopt their own ordinances and enforce them or co-adopt the County ordinances and request enforcement by OSWM.
5. The County will offer waste programs to manage special wastes such as used oil, batteries, and other such materials that the private sector collectors and facilities may be unable or unwilling to accept from residents.
6. The County will provide local permitting and regulation of the LCSWMF and private solid waste management facilities in order to supplement Federal and State regulations and to protect human and environmental health and safety and to promote disposal options.

IMMEDIATE ACTION INITIATIVES

7. The District members recommend that the Board of Supervisors amend Chapter 1080, the Zoning Ordinance, and other appropriate County ordinances to prohibit burning of MSW; to prohibit the burning of vegetative waste and CDD waste generated off-site; to restrict unauthorized dumping of waste dirt; to regulate surface piles of waste dirt; and, to regulate soil processing.
8. The District members recommend that the Board of Supervisors provide funding to expand the HHW program to up to twelve annual events by fiscal year 2005 in order to increase the opportunities and locations for residents to dispose of HHW properly.

FUTURE INITIATIVES

9. The County will expand waste oil and other special waste collection to two regional sites in the Western and Eastern parts of the County by fiscal year 2005, subject to available funding.

**Loudoun County
AdHoc Solid Waste Management Planning Committee Meeting
(LCSWMP)**

December 11, 2002

Planning & Public Information Discussion

Continuation of Current Actions

Immediate Action Steps

Future Planning Efforts

DISCUSSION QUESTIONS

- 1. As you review each Category, are any recommendations in need of clarification in terms of your understanding of what is meant?**
- 2. Do you have any comments, additions, changes, etc., to suggest to the Committee as they finalize their proposed recommendations?**

PLANNING AND PUBLIC INFORMATION

STATUS QUO ELEMENTS

1. OSWM will operate as the District's agent.
2. On behalf of the Towns and the County, OSWM will prepare and submit annual solid waste and recycling reports and will administer the State's Cooperative Litter Grant Program.
3. The District will monitor MSW disposal capacity availability and demand and will propose adjustments as needed for the life of this plan.
4. OSWM will provide solid waste public information and education and will promote recycling and source reduction by operating the Recycling Hotline, producing brochures, etc.
5. OSWM will provide technical assistance to the Towns regarding solid waste matters upon request.

IMMEDIATE ACTION INITIATIVES

6. OSWM will write an annual solid waste report for the District that summarizes all reporting information for haulers and facilities.
7. By January 1, 2004, OSWM will coordinate and facilitate the following conditions to prepare a more effective disaster or emergency response: pre-approval from DEQ of an emergency solid waste/debris site(s); mutual aid agreements with other jurisdictions in Northern Virginia; and, inclusion of solid waste management planning in the County's emergency management plan.

FUTURE INITIATIVES

8. To assess the SWMP's on-going validity and implementation, OSWM will conduct audits of the Plan, serving as the information agent to collect, analyze, and present reviews both annually and on an *ad hoc* basis.
9. OSWM will provide to the District a biannual report summarizing review results and recommendations for improvement of the SWMP.

Loudoun County
Solid Waste Management Planning District
Public Comment Form

Name: _____
Phone : _____
Address: _____

e-mail: _____
Date: _____

I represent one of the following organizations (please check one):

- | | |
|--|--|
| <input type="checkbox"/> Solid Waste Management Facility | <input type="checkbox"/> Home Owners Association |
| <input type="checkbox"/> Solid Waste Collector | <input type="checkbox"/> Business |
| <input type="checkbox"/> Special Interest Group | <input type="checkbox"/> Resident |

Please provide comments here:

To return this form to “Attention: Richard S. Weber”

Fax to: (703) 771-5523

E-mail to: www.oswm@loudoun.gov

Mail to:

Loudoun County Office of Solid Waste
Management
906 B Trailview Blvd. SW
Leesburg, VA 20175

This form is for the purpose of providing comments on the Draft Solid Waste Management Plan. Opportunities for public participation include open meetings, a discussion session in December 2002, a Board of Supervisors Public Hearing in March 2003, and the regular adoption processes of the Board of Supervisors and each Town Council.

AGENDA
Loudoun County Ad Hoc Solid Waste Management Planning Committee
Wednesday, January 22, 2003 6:00 PM
Lovettsville Room, Loudoun Co. Government Center, 1 Harrison St. SE, Leesburg

Welcome—Supervisor Sally Kurtz, Chair

1. Meeting Summary from November 20, 2002
2. Meeting Summary from January 8, 2003
3. Summary and discussion of comments and recommendations from the public input session
4. Transmittal of New Draft Chapter 5 – Solid Waste Management Plan Document (Committee Findings)
5. Next Steps

Ad Hoc Solid Waste Management Planning Committee Item 3: Consideration of Public Input Comments January 22, 2003

Background:

The Committee held a public input session on January 8, 2003. McCaffery Associates conducted this session using the small group discussion process. The County has used McCaffery Associates very successfully in similar public processes. The session was an opportunity for feedback from representatives of those parties most impacted by the draft plan. The meeting's approach is described in Agenda Item # 2 and the detailed comments from each of the four work groups is included with that item. This item summarizes the input from the session by first identifying topics that require further clarification. The item also provides a framework for the Committee to consider the input by placing comments and suggestions into eight categories. The Committee's discussion and decisions on these points should provide direction to staff on any changes to the Draft SWMP resulting from the input process.

Topics Requiring Further Clarification:

Several topics were discussed and required clarification beyond that provided by the technical expert in each group as follows:

- Collection of County generated solid waste
This topic is discussed in detail further in this item under Work Group Suggestions.
- Impact of reducing landfill tipping fees
This topic is also discussed in detail further in this item under Work Group Suggestions. There was considerable information presented to the Committee on this subject. The Plan will contain this information in the appendices. Time did not permit an exhaustive discussion of this matter during the meeting on January 8, 2003.
- Enforcement of litter control at construction site dumpsters
Recent amendments to Chapter 1084 of the Codified Ordinances of Loudoun County require solid waste containers to be maintained to preclude blowing litter, and leakage. OSWM will gain more experience with construction site dumpsters as it more fully implements its compliance efforts with construction and demolition debris collection and transportation in the next 12 – 18 months. The County does not expressly require that construction sites have dumpsters as is the case in some neighboring jurisdictions.

Consideration of Suggestions from the Work Groups:

This section identifies the comments and suggestions made by participants from the four work groups. At the end of each comment/suggestion is an indication of the number of participants making the comment. To assist the Committee in their deliberations, all suggestions have been grouped and discussed under eight (8) topical headings. For each topical area, a short staff response has been provided to summarize where the Committee recommendations are at this point. Once discussed, the Committee is requested to elect to pursue or not pursue the matter further. Should the Committee decide to pursue a particular suggestion, they should indicate if additional information desired and provide staff direction on any modifications to the Draft Plan text.

1. New or Expanded Recycling Programs

The following set of comments addressed the Committee's proposed expansions in recycling programs, or suggested that the Committee consider further programs.

- Expand and staff oil and other waste collections to (2) regional sites. (Groups 1, 2, & 3)
- Establish electronics recycling as a permanent program. (Group 2)
- The County should initiate a public awareness campaign focusing on the need to recycle uncommon electronic goods (i.e.: cell phones, VCRs, power tools, special batteries, etc.) (2 people in Group 3)
- The general consensus was the Internet-based waste exchange "sounds great", but concerns were raised regarding "how do you implement/manage it". (Group 1)
- The proposed waste exchange would be supported. (Group 4)
- The County should consider implementing a special wastes program for battery types other than automotive. (one participant)
- The populated, eastern part of the county has a greater need for HHW events. However, about 9 HHW events annually would be more cost appropriate than 12. (one participant)

Staff Response

- Special waste collection: The Committee has recommended the expansion of the special waste collection program currently conducted at the County SWMF. Two new sites, one each in the eastern and western parts of the County are recommended subject to budget constraints. These collection programs must be staffed due to the potential for users to contaminate collected material. This issue appeared to receive the strongest support of any discussed.

- Electronics recycling: The Committee does not have a specific finding on electronics. Chapter 3 of the current draft of the plan mentions anticipated regulations from EPA and notes that government programs must be put into place as the private sector cannot likely profit from such programs. The 2003 Virginia General Assembly is currently considering legislation that would mandate some type of electronics recycling program and ban CRT's from landfills. The County has held two pilot electronics collection events. Funds for logistical and promotional support are in the recycling budget while fees for certain materials are paid by users. Staff recommends that the Committee consider recommending that electronics collection become a regular part of the recycling and solid waste diversion program and that greater detail on this issue be included in the plan.
- Ni-Cad battery recycling: Staff concurs that Ni-Cad battery collection is an idea with merit but starting this program is likewise subject to budget constraints.
- HHW Collection: The Committee recommendation to expand the HHW collection program is for up to 12 events. Should this recommendation be accepted and funded by the Board of Supervisors, staff would phase in the additional events and would not hold events that the public did not support or attend.

2. Landfill Operations

The following set of comments addressed the Committee proposed changes to the operations policy of the County SWMF including the reduction in tipping fees.

- Haulers support the County landfill, which offers service to individuals who don't have collection services, such as in Western Loudoun County. (2 people in Group 2)
- The County should promote competition among Solid Waste Facilities. (Group 2)
- Tipping fee rates should be revised across the board. Tipping fee rates should be more competitive. (Group 2)
- Concern was expressed that if LCSWMF rates become competitive, it will go into the "landfill business" by competing with private industry. (Group 2)
- Rate reduction may encourage other jurisdictions to lower their rate, neutralizing the intent of the initiative. (Group 2)
- Rate reduction may attract additional volumes. (Group 2)
- Market forces for Solid Waste Facilities should be analyzed frequently. Lowering landfill fees one time may not be adequate. (Group 2)
- Lowering C&D tipping fees would not bring in additional business. (one participant)

Staff Response

The Committee recommendations to revise the Board's Landfill Operating Policy and reduce the tipping fee were a direct response to input from the collection industry. Staff believe that the Committee considered each of the issues raised in the comments made.

3. Outsourcing Collection of County-Generated Solid Waste

The following set of comments addressed the Committee's recommendation to maintain the status quo for collection of solid waste generated in County government buildings including schools.

- Industry would like to be considered for providing solid waste and recycling services to the County, if it could be done cheaper. (Group 2)
- The County should explore subcontracting collection of its own waste. (Group 4).
- Additional justification was requested as to why the County could not contract for solid waste collection. (Group 1)

Staff Response:

The County made this policy decision in the early 1990s based on a financial study. The major hauler in the County at that time supported the decision. The County currently has 4 trucks and collects from approximately 100 locations within the County including schools, community centers, fire and rescue stations and County buildings. Staff requested that the staff for this program be available to respond to any questions from the Committee.

4. Town/County Uniformity of Requirements and Cooperation

The following comments addressed the issues of cooperation between the Towns and the County with emphasis on consistent regulations and District-wide requirements.

- Towns should voluntarily adopt County ordinances to address dumping or improper storage of solid waste and enforcement of chapter 1080. The County should assist towns with enforcement. Towns should "make the ordinance standard to avoid confusion." Group stressed that they want an amendment to 1080, *County should include towns when addressing dumping/improper storage and enforcement.* (Group 4)
- The County should do everything in its power to bring the Towns on board with the new solid waste collection and recycling requirements, including offering subsidies. (2 people in Group 3)
- The Towns should be encouraged to participate in the planning of recycling facilities in land development review. The County should provide assistance. (Group 4)

- Concern was expressed that the County would not have adequate support to handle the enforcement of the ordinances if the Towns were to co-adopt them. (Group 2)
- The County should aggressively encourage the Towns to adopt the County's solid waste collection and recycling requirements, including offering subsidies. (2 people in Group 3)
- The Towns should be encouraged to follow the County's example and promote recycling by maintaining mixed paper recycling and procurement of recycled paper. (3 people in Group 4)
- Coordination with the towns is critical as part of the evaluation process when planning locations of DOC sites in the community. Transportation is the major point of concern on the Towns' part. There may be other issues that the Town needs to focus on in cooperation with the County. (3 people in Group 4)
- County and Town members should work towards consistent recycling and solid waste management. (one participant)

Staff Response:

These issues were discussed extensively by the Committee in September and October. Co-adoption of County solid waste ordinances and recycling standards was identified for consideration by the Committee. Due to concerns over cost impacts, some of the town representatives desired to have co-adoption remain as an option that could be explored subject to budget constraints. The Committee may wish to revisit this matter since it was a topic of interest in at least 3 of the 4 groups. Group members identified increased effectiveness in public information efforts and improved understanding of the requirements by the public and collection community as benefits that accrue from uniformity of requirements.

5. Solid Waste Planning Issues

The following set of comments focused on solid waste planning issues.

- The County should consider adding a second MSW transfer station. (Group 4)
- The County should convene a Business Advisory Committee with a focus on the new business recycling requirements (perhaps working with the Chamber of Commerce). (2 people in Group 3)
- The County should conduct a feasibility study on alternative methods of disposal. (2 people in Group 3)
- Loudoun County should examine the possibility of using "mined out quarries" as possible landfill sites in the future (2 people in Group 3).
- Recycling should be higher on the waste hierarchy than Disposal. (one participant)

- The convening of a Citizens Committee should be moved from “Long Range Planning” to “Immediate Action”. (one participant)
- District should survey private sector (haulers and generators of waste) for feedback on adequacy of disposal infrastructure. (one participant)

Staff Response:

- Adding a second MSW transfer station: The Board of Supervisors established its policy with regard to MSW transfer capacity in 2000. This policy is to permit sufficient capacity to handle the amount of MSW generated in the County with room for reasonable growth and to account for fluctuations in seasonal generation. That policy is included in the draft plan, and is currently implemented in Chapter 1080. In establishing that policy, the Board considered traffic and environmental concerns that would accrue should the County allow numerous transfer stations providing service to other jurisdictions. There is no guarantee that additional transfer stations would be owned by separate companies, or would reserve capacity for County-generated waste.
- Citizen Recycling Committee: The Committee has included a recommendation to appoint a recycling committee in the future to identify ways for the District members to achieve mandated recycling rates. The mandated rates are anticipated to increase within the next several years. The Committee could expand the scope of that group to include business recycling specifically, or could recommend a second committee.
- Alternative waste strategies: The County has conducted and participated in studies of alternative waste disposal strategies in the past. It has invested substantial funds in recycling and disposal strategies that work. The private sector has likewise invested substantial funds in transfer facilities.
- Use of quarries for landfills: The County has sufficient permitted landfill capacity to serve the District for longer than the term of the plan. The type of quarries present in Loudoun do not make suitable MSW landfill sites due to groundwater concerns, and other design constraints.

6. Construction Waste Study

The following set of comments addressed the Committee recommendation to request a regional study of construction waste generation and disposal capacity.

- The District should consider asking NVRC and MWCOG to conduct a regional study on “all solid waste types”, not just C&D, and extend the deadline beyond 2004. The study should evaluate both present data and future projections. (Groups 3 & 4)
- C&D may be difficult to track because other jurisdictions are not required to differentiate between types of waste. (Group 2)

- The County should conduct the regional study if NVRC or MWCOG will not. (Group 2)
- The County should prepare a study that evaluates construction waste generated within Loudoun County only. (Group 2)

Staff Response

The Committee has recommended the construction waste study focus due to the lack of information on this element of the waste stream. Most jurisdictions have largely ignored construction waste flow while they concentrated on MSW. The County does not need supplemental information on MSW, as there is information available at the current time. The study of construction waste should be regional since the current management system for this waste ignores jurisdictional boundaries. The Committee may wish to extend the requested response date for the study.

7. Construction Waste Recycling

The following set of comments addressed various issues related to the recycling of construction waste.

- The County should support dry waste reclamation projects relating to construction projects. (Group 2)
- The following should be added to Future Initiatives: "County and Towns will support and incorporate in the Solid Waste Management Plan dry waste/C&D reclamation products which may encompass separation, processing, and/or re-application/re-use of material." (Group 2)
- The District should consider incentives for recycling additional construction material. (one participant)

Staff Response

The Committee has discussed construction recycling initiatives. It was decided to wait until the construction waste study results were in to consider specific initiatives. The Committee may wish to increase the focus on this issue.

8. Increase Effort on Public Education and Outreach

The following set of comments addressed various aspects to improve public education and outreach.

- The County needs to clearly identify where the minimum service levels can be found in 1084. (Group 4)
- Town contracts should state the minimum levels of service for collection and recyclables. (one participant)

- District members should provide a brochure/flyer to residents to explain the minimum requirements of their recycling contractors. (Group 4)
- Put more emphasis on the resident to recycle. (Group 2)
- The County should initiate a “Green Campaign” to reaffirm the importance of and need to recycle. (2 people in Group 3)
- Improve communications about solid waste and recycling to ensure that this information gets to the people who can make it happen. (Group 1)
- The County should initiate a public awareness campaign focusing on the need to recycle uncommon electronic goods (ie: cell phones, VCRs, power tools, special batteries, etc.) (2 people in Group 3)
- OSWM should continue to provide public information and education and promote recycling and source reduction. (one participant)

Staff Response

- County identification of requirements: OSWM staff have prepared and distributed a brochure for general distribution and several solid waste collectors and Homeowners’ Associations have used the material to distribute to customers and residents. The brochure and / or its contents are on the County’s website and have been the subject of several press releases. The brochure identifies the minimum service levels in lay language.
- Town Contracts: OSWM assumes that town contracts do specify minimum service levels. The towns may wish to consider a brochure like the one developed by the County should they not have one currently.
- Generic Recycling Message: This topic was identified during the Committee discussions in September and October. Staff concurs that the ground-swell of recycling messaging in the 70s and 80s has waned and should be reinstated. Uniform recycling requirements that facilitate simple recycling messages in the media would significantly aid the achievement of this objective.

9. Recycling Issues

The following set of comments addressed various issues regarding recycling.

- Concern was expressed that residents would rather use the DOCs than pay for curbside recycling. DOCs sites seem to be more for the rural area not for heavy populated areas. (Group 2)
- It is difficult to provide curbside services to rural areas and be cost effective. (one participant)
- There is no way to correct the accuracy on recycling reports currently provided by businesses and haulers. (3 people in Group 4)
- Haulers should not be responsible for recycling material that has been contaminated by residential or commercial users. (Group 2)

- More clarification is needed on how collectors should handle contamination of recycled containers. (one participant)
- Constructing a DOC in the Purcellville area and revising the comprehensive County-wide joint-use public facility plan to incorporate DOCs in all appropriate public facility sites is contradictory. (one participant)

Staff Response

- Recycling DOC locations: Staff does not believe the Board's policies of mandatory curbside collection of recyclables and provision of DOC sites to be in conflict. These two policies serve two separate and distinct needs. The minor collectors are not required to provide curbside recycling services. DOC's supplement curbside recycling and should be located in the transportation corridors for maximum use and convenience.
- Recycling reporting: Staff believes that the accuracy of recycling reports will gradually improve under the recently adopted County regulations.
- Contamination: Contamination of recyclables is a constant issue. If contaminated recyclables are set out on the curb, the collector is not obligated to collect them. The collectors have new responsibilities under the County Ordinances to advise customers of their set out requirements. As the County and Towns work towards standardization of requirements, educational outreach programs will be focused on reducing contamination.

10. Miscellaneous Comments

The following comments did not fit into any of the identified topical area.

- Individuals should be held to the same standards as haulers. Anti-litter laws and tarpaulin (covered load) standards should apply to everyone. (2 people in Group 1)
- Although regulating C&D collectors is currently happening, phasing in the regulation in Chapter 1084 is a good step. (Group 2)
- Haulers are only responsible for offering a service, subject to customers' request. (one participant)
- Hauler's responsibility is to haul waste to the facility. It is the facility's responsibility to separate the recyclable material from the trash. (one participant)

Staff Response

The comment regarding individuals and collectors requirements to secure loads identifies a valid issue, but it is a vehicle regulation and not a solid waste issue beyond the scope of the solid waste management plan. The comments regarding hauler's responsibilities are not correct. Haulers have certain responsibilities under the County's solid waste ordinances and Town contracts that they are obligated to meet if they wish to be in the collection business.

**Ad Hoc Solid Waste Management Planning Committee
Item 4: Draft Solid Waste Management Plan Chapter 5 –
Findings and Outcomes of the SWMP Committee
January 22, 2003**

Background:

The Committee completed its straw votes on the policy issues and options on November 20. In reviewing the draft SWMP document, staff realized there was no section in the plan to capture the Committee's extensive discussion of the policy issues and options. Since these policy issue options form the basis for much of the Committee's recommendation for action, Chapter 5 has been developed as a separate chapter to reflect the Committee's findings and outcomes. Chapters 6 and 7 will provide Goals and Objectives and Implementation of the plan, respectively. A revised draft of the entire SWMP will be the subject of the next Committee meeting.

Summary of Chapter 5 and Relationship to Draft SWMP

Chapter 5 is a summation of the Committee Findings and Outcomes discussed and voted upon over the four meetings of September 25, October 9, October 23 and November 20. Status quo elements of the solid waste management system that were inferred have been described. The goals and objectives have been revised to address the continuity issue as well. The intent of these changes is for the reader to connect the implementation plan (Chapter 7) with the Objectives (Chapter 6), with the Findings Chapter 5, and nest all under the revised Goals in Chapter 1.

Committee Action

Staff requests that the Committee review and affirm the Findings and Outcomes as presented in draft Chapter 5. While all of the new proposals in the plan received actual Committee votes, some of the status quo findings are inferred. The Committee should consider these Findings and Outcomes and offer revisions as appropriate.

Draft Motions:

1. I move that the Committee adopt draft Chapter 5 as attached as its Findings and Outcomes for inclusion in the Solid Waste Management Plan.

OR

2. I move that the Committee adopt draft Chapter 5 for inclusion in the Solid Waste Management Plan with changes as follows:

(List changes)

**Attachment 1: New Draft Solid Waste Management Plan Chapter 5 –
Findings and Outcomes of the SWMP Committee**

AGENDA
Loudoun County Ad Hoc Solid Waste Management Planning Committee
Wednesday, February 12, 2003 6:00 PM
Lovettsville Room, Loudoun Co. Government Center, 1 Harrison St. SE, Leesburg

Welcome—Supervisor Sally Kurtz, Chair

1. Meeting Summary from January 22, 2003
2. Resolution of Outstanding Issues
3. Transmittal of the Final Committee Draft of the Solid Waste Management Plan
4. Next Steps

Attachment 1
Meeting Summary dated January 22, 2003
Included in Appendix D

**Ad Hoc Solid Waste Management Planning Committee
Item 2: Resolution of Outstanding Issues
Loudoun County Solid Waste Management Planning District
February 12, 2003**

Background:

During the meeting on January 22, several issues were raised by Committee members requiring additional information. Since that time, staff has received one written Public Comment Form that raises several suggestions. This item summarizes all outstanding issues for the Committee.

Cost for School Staff to Collect Trash and Recyclables from Public Buildings

The Ad Hoc SWMPC requested Mr. Mohler, Assistant Superintendent for Support Services, LCPS, to provide summary information on the cost to collect the trash and recyclables at public schools, and trash from County buildings. The information requested is included as **Attachment 1**. The total reported by Mr. Mohler is \$199,201 for FY2003. The County Public Works Division of General Services incurs contractual costs of an additional \$33,874 for FY2003 to cover collection and transport of recyclables from County buildings.

Recommendations to Control Open Burning During Periods of Poor Air Quality

At the meeting on January 22, Supervisor Burton and Mayor Walker requested that the findings, objectives, and implementation section of the LCSWMP be revised to recommend changes to County solid waste and fire ordinances to prohibit open burning during the portion of the year when poor air quality is likely to occur. Section 9 VAC 5-40-5645 of the Virginia Administrative Code (**Attachment 2**) identifies the months of June, July, and August when such additional open burning regulations may be appropriate. Adjustments to the findings, objectives, and implementation sections of the draft plan have been made to incorporate this recommendation.

Public Comment from Mr. Jack Freeman

Mr. Freeman submitted written comments (**Attachment 3**). Mr. Freeman's primary concern was the District's reliance on landfilling in lieu of incineration and resource recovery as the primary solid waste management technique. Mr. Freeman suggests that the Committee reconsider its recommendation on this matter.

The County pursued a multi-jurisdictional resource recovery project with the City of Manassas and Prince William County for approximately five (5) years in the mid-late 1980s. Ultimately the project effort was terminated due to siting constraints and costs.

Siting an incinerator in Loudoun County or any other nearby jurisdiction would be even more difficult politically today than in the 1980s. Loudoun County is also part of the Metropolitan Washington DC non-attainment area on air quality, an additional reason that building an incinerator would be prohibited. Further, because the District does not control its waste stream outside of the incorporated Towns (which they do by contract), waste cannot be directed to a County incinerator or any other County facility without a contractual arrangement. Given the variable nature of waste flow, an incinerator would not work financially in Loudoun at this time.

Attachment 1: Memo from Evan Mohler, Assistant Superintendent for Support Services, LCPS, February 4, 2003. Annual Expenditures for Trash Collection and Recycling for Loudoun County Public Schools and Trash Collection for the County of Loudoun.

Attachment 2: Excerpt from 9VAC 5 Chapter 40. Part II. Art. 40, Emission Standards for Open Burning (Rule 4-40).

Attachment 3: Public Comment Form, Jack Freeman, January 29, 2003.

03-02-28



LOUDOUN COUNTY PUBLIC SCHOOLS

Office of Support Services

51 Plaza Street, S.E.

Leesburg, Virginia 20175

Telephone: 703-771-6450

Fax: 703-771-6453

March 28, 2003

**TO: LOUDOUN COUNTY SOLID WASTE MANAGEMENT
PLANNING COMMITTEE**

FROM: Evan E. Mohler, Assistant Superintendent for Support Services

**SUBJECT: ANNUAL EXPENDITURES FOR TRASH COLLECTION AND
RECYCLING FOR LOUDOUN COUNTY PUBLIC SCHOOLS AND
TRASH COLLECTION FOR THE COUNTY OF LOUDOUN**

Salary and Fringe Benefits

3 Refuse equipment operators	\$122,163
------------------------------	-----------

Operation, Maintenance and Depreciation Costs

4 Refuse trucks - 3 for trash and recycling and 1 spare
for inspections, repairs and emergencies
(51,890 miles annually)

Fuel	\$ 12,408
------	-----------

Maintenance	\$ 25,371
-------------	-----------

Annual depreciation (15 year life)	\$ 37,759
------------------------------------	-----------

Refuse container maintenance	<u>\$ 1,500</u>
------------------------------	-----------------

Total Annually	\$199,201
-----------------------	------------------

Refuse collection, coverage for six (6) days per week County and School Board sites including special collection runs, i.e. sporting events, burn facility, school fairs, etc.

Annual Expenditures for Trash Collection and
Recycling for Loudoun County Public Schools and
Trash Collection for the County of Loudoun

Page 2

Tonnage FY02

Municipal solid waste – dirt containers	4,142.34 tons
Mixed waste	74.47 tons
Yard waste	44.30 tons
Construction waste – treated wood	16.21 tons
Concrete block, asphalt	704.27 tons

Additional Landfill Waste FY02

Car tires	56
Refrigerated appliances	7
Large tractor tires	4
Tires on rims/from pit area	2

Cc: Dr. Edgar Hatrick, Division Superintendent
Bill Kolster, Director of Facilities
Mike Lunsford, Director of Transportation

COMMONWEALTH OF VIRGINIA
STATE AIR POLLUTION CONTROL BOARD
REGULATIONS FOR THE CONTROL AND ABATEMENT OF AIR POLLUTION

9 VAC 5 CHAPTER 40.
EXISTING STATIONARY SOURCES.

PART II.
Emission Standards.

ARTICLE 40.
Emission Standards For Open Burning (Rule 4-40).

- 9 VAC 5-40-5600. Applicability.
- 9 VAC 5-40-5610. Definitions.
- 9 VAC 5-40-5620. Open burning prohibitions.
- 9 VAC 5-40-5630. Permissible open burning.
- 9 VAC 5-40-5631. Forest management and agricultural practices.
- 9 VAC 5-40-5640. Repealed.
- 9 VAC 5-40-5641. Local ordinances on open burning.
- 9 VAC 5-40-5645. Waivers.

9 VAC 5-40-5600. Applicability.

A. Except as provided in subsection C of this section, the provisions of this article apply to any person who permits or engages in open burning or who permits or engages in burning using special incineration devices.

B. The provisions of this article apply throughout the Commonwealth of Virginia.

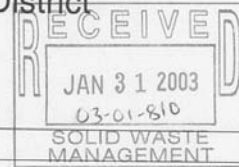
C. The provisions of this article do not apply to such an extent as to prohibit the burning of leaves by persons on property where they reside if the local governing body of the county, city or town in which such persons reside has enacted an otherwise valid ordinance (under the provisions of _ 10.1-1308 of the Virginia Air Pollution Control Law) regulating such burning in all or any part of the locality.

9 VAC 5-40-5610. Definitions.

A. For the purpose of these regulations and subsequent amendments or any orders issued by the board, the words or terms shall have the meaning given them in subsection C of this section.

B. As used in this article, all terms not defined here shall have the meaning given them in 9 VAC 5 Chapter 10 (9 VAC 5-10-10 et seq.), unless otherwise required by context.

Loudoun County
Solid Waste Management Planning District
Public Comment Form



Name: JACK FREEMAN
Phone: 703-723-6320
Address: 19375 Cypress Ridge Terrace
708
Lansdowne, VA 20176
e-mail: jackfree@msn.com
Date: Jan 29, 2002

I represent one of the following organizations (please check one):

- | | |
|--|---|
| <input type="checkbox"/> Solid Waste Management Facility | <input checked="" type="checkbox"/> Home Owners Association |
| <input type="checkbox"/> Solid Waste Collector | <input type="checkbox"/> Business |
| <input type="checkbox"/> Special Interest Group | <input type="checkbox"/> Resident |

Please provide comments here:

- Very well organized + presented
- Impressed by work of the committee and by the professional staff of the OSWM.
- Plan seems quite sensible and appropriate to LC needs.
- Only issue of importance is the plan to rely on landfills, rather than incineration. Although costs and political/community acceptance are barriers to incineration, scientific + technical advances have made incinerators almost totally non-polluting. The Committee should reconsider its position on continued reliance on landfill disposal.

To return this form to "Attention: Richard S. Weber"

Fax to: (703) 771-5523
E-mail to: www.oswm@loudoun.gov

Mail to:
Loudoun County Office of Solid Waste
Management
906 B Trailview Blvd. SW
Leesburg, VA 20175

This form is for the purpose of providing comments on the Draft Solid Waste Management Plan. Opportunities for public participation include open meetings, a discussion session December 2002, a Board of Supervisors Public Hearing in March 2003, and the regular adoption processes of the Board of Supervisors and each Town Council.

**Ad Hoc Solid Waste Management Planning Committee
Item 3: Final Committee Draft of the Solid Waste Management Plan
Loudoun Solid Waste Management Planning District
February 12, 2003**

Background:

The Committee has been meeting since September 2002 to develop a draft Solid Waste Management Plan for the Loudoun Solid Waste Management Planning District. During that time period, staff has distributed draft chapters of plan text for Committee members to review and comment on. The Committee summarized their recommendations and hosted a public input session on January 8, 2003, to receive feedback on the major elements of the plan. The Committee met on January 22, to consider any revisions desired as a result of the public's input. No major revisions were requested. The purpose of this item is to transmit the final Committee Draft of the Plan to the Committee for final comment, revision, and certification to the local governing bodies for consideration and approval.

Summary of Changes Since Previous Distribution:

All of the text has been previously transmitted to the Committee. This section identifies any significant changes that have been made to the text since it was previously provided to the Committee.

Table of Contents

The table of contents has been revised to incorporate all of the revisions in the various chapters outlined in this document. A glossary of terms, abbreviations, and acronyms has been provided.

Chapter 1: Introduction and Overview

The goals of the plan have been modified in format to fit the findings and objectives as revised.

Chapter 2: Waste Characterization and Quantities

This chapter has not changed significantly since originally presented to the Committee. A crosswalk review of the State regulations and plan text identified missing required information for this chapter. Several waste types were inadvertently overlooked in the original text. Asbestos, farm wastes, sludges, and animal carcasses as wastes have been added in Section 2.3.8.

Chapter 3: The Solid Waste Management System

This chapter has not changed significantly since originally presented to the Committee. A crosswalk review of the State regulations and plan text identified missing required information for this chapter. The inventory of sites that have been used for disposal in the County has been added as Section 3.4.4. This information differs from the list of facilities, many of which are not disposal sites. The inventory includes historical dumps such as those used by towns, TFI/SWPP, and the Hidden Lane Landfill.

Chapter 4: Consideration of the Solid Waste Hierarchy

This chapter has not changed significantly since originally presented to the Committee.

Chapter 5: Findings and Outcomes of the Ad Hoc SWMP Committee

This chapter has not changed significantly since originally presented to the Committee on January 22, 2003. The modifications requested on burning solid waste were incorporated.

Chapter 6: Objectives for the Solid Waste Management Plan

This chapter (was originally distributed as Chapter 5 in October 2002) has been revised substantially to respond to the development of Chapter 5 Findings, and the revisions to Chapter 7.

Chapter 7: Implementation of the Solid Waste Management Plan

This Chapter was originally distributed as Chapter 6 in October. It has been completely rewritten to incorporate all of the Committee's recommendations and continuation of the status quo items.

Chapter 8: Funding the Solid Waste Management System

This chapter has not changed significantly since originally presented to the Committee (originally distributed as Chapter 7 in October). The future funding section has been completed and says that the Towns will rely on tax proceeds to fund service contracts, and that the General Fund will fund the County's solid waste programs.

Chapter 9: Public Participation

This chapter has been updated to incorporate a description of the public participation session on January 8, 2003. It was originally distributed as Chapter 8 in October.

Appendices

Staff has not previously distributed any of the appendices as such to the Committee. The Appendices are provided to provide supplemental information for context, to hold

documents of a temporal nature that are used extensively as stand alone documents, and to complete the public record. The types of documents contained in the appendices include the State recycling rate calculation rate form, the lists of permitted collectors, the list of permitted solid waste management facilities, Committee meeting items, and Committee meeting summaries, and County Solid Waste Ordinances. Some of the appendices have been taken from previously distributed text (such as the landfill or recycling policies), meeting items, and meeting summaries to document the record.

Committee Action:

Committee Chair Kurtz requests that Committee members read the draft of the Solid Waste Management Plan in advance of the meeting on February 12, 2003, and come prepared with comments and suggestions as needed. The Committee has previously received all of the material in the draft and a line by line review is not anticipated. When the Committee is satisfied with the document, Chairman Kurtz further requests that the Solid Waste Management Plan for the Loudoun County Solid Waste Management District be forwarded to the Loudoun County Board of Supervisors and the Town Councils of the District members with a recommendation of approval.

Pending completion of the Committee's work, Chairman Kurtz is planning a briefing for the Board of Supervisors at their regular business meeting on March 17 and a Public Hearing tentatively scheduled for April 8, 2003 in the Board of Supervisors meeting room. Following the Public Hearing, action by the Board of Supervisors is tentatively set for April 21, 2003, and action by the member Town Councils in early May.

Draft Motions:

1. I move that the Ad Hoc Solid Waste Management Plan Committee approve the final Committee Draft of the Solid Waste Management Plan for the Loudoun Solid Waste Management Planning District and forward it to the Loudoun County Board of Supervisors and the Town Councils of the District members with a recommendation of approval.

OR

2. I move that the Ad Hoc Solid Waste Management Plan Committee revise the final Committee Draft of the Solid Waste Management Plan for the Loudoun Solid Waste Management Planning District with changes as follows:

(List changes)

and forward the revised document to the Loudoun County Board of Supervisors and the Town Councils of the District members with a recommendation of approval.

Attachment 1: New Draft Solid Waste Management Plan

03-02-29

**Ad Hoc Solid Waste Management Planning Committee
Item 4: Next Steps for the Solid Waste Management Plan
Loudoun County Solid Waste Management Planning District
February 12, 2003**

Introduction:

This item outlines the next steps for completing and approving the Solid Waste Management Plan. Pending the Committee's final action on the Draft Plan, a tentative schedule for completing the official public review, comment and approval by the legislative bodies of the District members is provided below. Because of the Plan's current funding implications for the County Board of Supervisors, it is recommended that the member Town Councils consider final approval of the Plan after the Board has made its decision on the Plan. Should the Committee decide that the Plan needs considerable work before approval, the schedule will be revised.

Presentation to the Board of Supervisors

Supervisor Kurtz, Chairman of the Ad Hoc Solid Waste Management Planning Committee, is planning a presentation of the Plan's key elements at the Board of Supervisors' regular business meeting on Monday, March 17, 2003. Elected officials and Committee members representing the District member Towns will be notified of this presentation and encouraged to attend.

Public Hearing and Opportunities for Public Comment

A Public Hearing for the Solid Waste Management Plan has been tentatively scheduled for the Board of Supervisors' regularly scheduled Public Hearing on April 8. The Legal Notice for the Public Hearing will be advertised, per State law and local policy, two times in a local paper prior to the date. At the time of the Legal Notice, public review copies of the plan will be available in the County Administrator's Office as well as from the Office of Solid Waste Management. The meeting will be posted on the County's official calendar and interested parties who have participated in the Solid Waste Management Planning process and meetings will be notified of an additional opportunity to speak at the hearing or to provide comment to the Board of Supervisors by letter or e-mail.

Elected officials and Committee members representing the District member Towns will be notified of this Public Hearing and will be encouraged to attend. According to the Virginia Department of Environmental Quality, additional public hearings by member Towns will not be required.

Approval of the Solid Waste Management Plan

Board of Supervisors' action on the SWMP is anticipated at its regular Business Meeting on April 21. Member Town Councils may consider scheduling review and action on the SWMP during the month of May. The Plan must be submitted to DEQ by July 1, 2004, but the goal is to complete the Plan development process and submit an adopted plan by July 2003.

APPENDIX D
AD HOC SOLID WASTE MANAGEMENT PLANNING COMMITTEE
MEETING SUMMARIES

This appendix provides a copy of the meeting summaries for each meeting of the Ad Hoc Solid Waste Management Planning Committee.

Document	# of Pages
1. Meeting Summary for September 11, 2002 (presented on September 25, 2002)	3
2. Meeting Summary for September 25, 2002 (presented as Attachment 1 to Item 2 on October 9, 2002)	5
3. Meeting Summary for October 9, 2002 (presented as Attachment 1 to Item 2 on October 23, 2002)	7
4. Meeting Summary for October 23, 2002 (presented as Item 2 on November 20, 2002)	7
5. Meeting Summary for November 20, 2002 (presented as Item 1 on January 22, 2003)	6
6. Meeting Summary for January 8, 2003 (presented as Item 2 on January 22, 2003) (includes recorder notes from each of the four discussion groups)	15
7. Meeting Summary for January 22, 2003 (presented as Item 1 on February 12, 2003)	5
8. Meeting Summary for February 12, 2003 (not distributed to the Committee)	4

APPENDIX D
AD HOC SOLID WASTE MANAGEMENT PLANNING COMMITTEE
MEETING SUMMARIES

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Loudoun County Ad Hoc Solid Waste Management Plan Committee
Meeting Summary
September 11, 2002

Present:

County: Sally Kurtz, Chairman
Jim Burton
Eleanore Towe

Towns: Tom Mason, Town of Leesburg
Keith Reasoner, Town of Hamilton
Kelly Yost, Town of Round Hill
Charles Hartgrove, Town of Middleburg

Absent: Elaine Walker, Town of Lovettsville
Steve Morgart, Town of Hillsboro
Rob Lohr and Martin Kloeden, Town of Purcellville
Kristin Umstattd and Robert Noe, Town of Leesburg

Call to Order

Sally Kurtz, Chairman, called the meeting to order, which was followed by introductions from the town representatives and staff.

Ms. Kurtz reviewed the purpose of the committee, which is to review and provide revisions to the Solid Waste Management Plan (SWMP). She also discussed the process and schedule requirements. She reviewed the proposed meeting schedule of the committee, which may include two public input sessions, using the small group process, to receive feedback from special interest groups on the SWMP. These sessions are scheduled to be held in October. The committee will then review this feedback as they update the plan document at their November meetings. Ms. Kurtz intends to present the final draft plan to the full Board in December. She noted that all of the incorporated towns will be included in the Solid Waste Management Planning District.

Ms. Kurtz referenced the materials provided for tonight's meeting which include a draft of the first four chapters of the Solid Waste Management Plan; a letter dated August 13, 2002 to the ad hoc committee members; as well as a copy of the staff slide presentation. She noted that a letter from the River Creek Owners Association had been received regarding the cost of refuse service for River Creek and will be discussed at the next meeting.

Staff Presentation – Part I - Trash: Who Makes It? What Are They Making and How Much Are They Making?

Stacey Anderson, with the Office on Solid Waste Management, provided the first part of the presentation, which included:

- Growth indicators and demand factors;
- Waste types;
- Solid Waste Management Planning through the years; and
- Waste generation (MSW, construction debris, vegetative, and automobile maintenance waste).

Staff noted that the biggest change in the Solid Waste Management Plan will be the additional waste types considered in the plan including “special wastes” that require special handling such as petroleum contaminated soils and construction wastes such as drywall and waste lumber.

Staff responded to questions from the committee members and town representatives regarding disposal of various wastes, i.e., latex paints, tires, etc. Staff also responded to questions related to the amount of waste going to transfer stations vs. County landfill.

Staff Presentation - Part II – Trash: Where Does It Go and Who Takes It?

The second part of the presentation was provided by Jane Tatum, also with the Office of Solid Waste Management, who reviewed the following components:

- Solid Waste Management System Service Providers;
 - private sector
 - the Towns
 - the County
- Solid Waste Management Facilities;
- Current System Capacity;
- Recycling;
- Public Information & Education;
- Waste Flow Models; and
- Virginia Waste Hierarchy

Staff responded to questions related to calculations used to obtain numbers on waste distribution; recycling rates and household hazardous waste. Staff also reviewed the various phase requirements of the landfill and capacity projections.

(A copy of the staff presentation is available at the Office of Solid Waste Management or the Office of the County Administrator.)

Next Meeting

Ms. Kurtz announced that the next meeting of the Committee is scheduled for Wednesday, September 25 at 6 p.m. in the Board Room. She asked that any questions from tonight's meeting be forwarded to her within the next two days to allow staff time to prepare information. She also noted that staff would provide information related to financing the system and review other issues and options at the next meeting.

Adjourn

There being no further business to come before the committee, the meeting was adjourned.

**Loudoun County Ad Hoc Solid Waste Management Planning Committee
Item 2, Attachment 1
Meeting Summary for September 25, 2002
October 9, 2002**

Present:

County: Supervisor Sally Kurtz, Chairman
Supervisor Jim Burton

Town Representatives: Tom Mason, Town of Leesburg
Charles Hartgrove, Town of Middleburg
The Honorable Elaine Walker, Town of Lovettsville
Martin Kloeden, Town of Purcellville
Kelly Yost, Town of Round Hill

Absent: Supervisor Eleanore Towe
Steve Morgart, Town of Hillsboro
The Honorable Kristin Umstattd, Town of Leesburg
Robert Noe, Town of Leesburg
Keith Reasoner, Town of Hamilton

Call to Order

Sally Kurtz, Chairman, called the meeting to order, which was followed by introductions from the Town representatives, staff and members of the public.

Review of Agenda

Mrs. Kurtz reviewed the agenda, highlighting staff presentations for the meeting: Agenda Items 3 and 4 are about financing the solid waste management system and Agenda Item 5 is about assorted issues in the system. Mrs. Kurtz noted that Michael Fairbanks, manager of the Loudoun County Landfill, would give a finance presentation and take questions, followed by a short break. After the break, staff would present issues and options for the system to include Committee discussion.

Follow-up to September 11 Meeting-Questions/Issues

Richard Weber, Director of the Office of Solid Waste Management (OSWM), reviewed a letter from River Creek Owners Association. The Association had been told that a lack of facility capacity in the County was affecting trash collection costs for River Creek. This information was included in the meeting packet materials.

Mr. Weber also addressed a question raised in a letter to the Chair from Mayor Reasoner of Hamilton. He spoke of successful use of recycled concrete in the Town of

Hamilton, and indicated that the District might wish to consider some effort to increase the level of concrete recycling.

The meeting summary of September 11 was accepted as presented.

Staff Presentation

Ms. Kurtz suggested that staff review each issue with the corresponding Options. She asked that the Committee take straw votes on Options as outlined below.

Recycling Issues:

Kate Glass, Recycling Coordinator, presented issues and options about recycling.

Issue 1 – How will the LCSWMPD maintain compliance with the Existing 25% Recycling Rate?

Discussion: Town representatives provided their experience with their contract recycling requirements. This discussion included a cost comparison among the representatives.

Suggestions/ideas: Towns participating as one contract; reminding residents to recycle by letter on annual basis.

Options and Straw Votes:

1. Do nothing further until results of ordinance amendments are known (No Formal Vote Taken—The inferred vote was 0-7 in favor of consideration of Option 2).
2. Town members of SWMPD could adopt Chapters 1084 and 1086 (7-0).
Consensus on this Option, pending Town representatives check with respective Town councils and if there is no cost impact. (County staff is to bring back further information as to the potential fiscal impact on the Towns if these ordinance amendments are implemented.)

Issue 2 – How will the Board address the Deficit in the Recycling DOC policy implementation to insure that convenient and equitable recycling opportunities will be maintained for the residential and business communities?

Discussion: Committee inquired about the cost of DOCs and location of various sites. Questions about locating at schools, fire companies' facilities were discussed as well as DEQ's enforcement for recycling if the County does not meet 25% rate. Committee members asked why DOCs could not be included in standard design of new schools and requested staff determine how many parking spaces would be eliminated if DOCs were installed. (*The request about parking spaces was withdrawn*).

Options and Straw Votes:

1. Funding additional DOC sites is not a current priority due to budget constraints (No Vote Taken).
2. Develop a capital improvement and funding schedule to construct and operate DOCs for immediate needs in the Purcellville area, to replace three sites lost in 1995, and in the Ashburn and South Riding areas (No Vote Taken).
3. Develop a capital improvement and funding schedule to implement fully the County's current recycling policy (No Vote Taken).
4. Develop a recycling dropoff center plan for co-locating DOCs in a comprehensive Countywide joint-use public facility plan for parks, schools, fire stations and other capital projects (7-0).

Issue 3 – Does the District wish to proactively address future increases in the recycling rate?

Discussion: The Committee inquired if Option 2 of Issue 3 were adopted, would a recycling rate committee begin meeting after adoption of the SWMP in July 2003. Staff responded that was correct. Mr. Burton indicated that he was uncertain about being too proactive, and asked staff to continue to carefully study any developments and make recommendations. Mrs. Walker agreed with prior comments but felt that Option 3 would be a good incentive (both Options 2 and 3 go together). Mr. Hartgrove agreed with Mr. Burton on staff study and assessments. Mr. Mason stated that he would support outreach programs and that the District should not get ahead of state requirements. He said he believes Option 2 is better. Mr. Kloeden stated that being proactive is important and supports Option 2. He further stated that this would ensure that a plan is in place if and when rates increased.

Options and Straw Votes:

1. Take no action at this time and wait for an increase to be announced (No Formal Vote Taken—The inferred vote was 0-6-1 in favor of Option 2).
2. Refer the issue to a committee for formal study and could be deferred until after SWMP process is complete. A study/work group could be appointed to assess options and provide recommendations for consideration by the District membership within 18 months (6-0-1, Burton abstained).
3. Increase the current level of recycling program effort to achieve higher rate (2-4-1 Kurtz and Walker, Yes; Burton abstained).

Issue 4 – Does the District Wish to Set a Higher Recycling Goal?

Discussion: Staff responded to a question to clarify the difference between arboreal and yard waste. There were also comments on development waste and how that is counted within the total recycling rates and clarification on targeting specific rates. Town representatives commented on their experience with yard waste collection. Mr. Mason indicated that he would prefer Option 1 for the time but would need to know what the increased rates would be and the source of materials that would be recycled. Ms. Kurtz commented that yard waste should not be leaving someone's yard—it could be recycled as mulch, etc. and would like to see yard waste excluded. Discussion continued on this. Mr. Burton commented that he would expect the recycling rate to increase based on earlier actions taken by the Board.

Craig Stuart-Paul of Fairfax Recycling, Inc., made comments regarding the difficulty of locating a recycling facility in Loudoun County. He stated that a lack of collection infrastructure makes it difficult for him to get recyclables out of Loudoun County and that zoning issues make it difficult to build the facility he would like to build. Mr. Stuart-Paul spoke to rebates paid by his facilities in other jurisdictions, and also spoke to new recycling technologies he is eager to begin using in Loudoun County.

Steve Cawthron, a private citizen and a member of the Woods Road Special Exception Review Committee (WRSERC), commented that a significant portion of the current 28% recycling rate is related to new growth through CDD (6.3%) and arboreal waste (5%). Mr. Cawthron noted that if new growth in Loudoun County were reduced by even half due to economic forces then the District would not be able to meet the 25% mandate. Mr. Cawthron further commented that he believed the recycling rate in Loudoun County could be improved and the reliance on development-related waste could be reduced. He said that there are small but vocal groups of people in Loudoun County who believe in recycling—as he does—and that given a chance they could improve recycling in the County.

Options and Straw Votes:

NOTE: Due to technical difficulties, the actual voting on these options is unclear. Staff requests that the Committee affirm or correct the tallies below.

1. Do not set a higher recycling rate at this time (Inferred 5-2).
2. Set the recycling rate target at 25% excluding yard waste (Inferred 2-5).
3. Target specific rates for specific waste types such as MSW, CDD or vegetative wastes (Inferred 2-5).
4. Set the recycling rate goal higher than the minimum rate without respect to waste type (Inferred 0-7).

Due to time constraints, the Committee will continue review of the remaining Issues and Options at the next meeting. Ms. Kurtz asked that questions be submitted prior to the next meeting.

Next Meeting

The next meeting of the Ad Hoc SWMP Committee is scheduled for Wednesday, October 9 at 6 p.m. in the Board Room.

Adjournment

There being no further business to come before the Ad Hoc SWMP Committee, the meeting was adjourned.

Loudoun County Ad Hoc Solid Waste Management Planning Committee
Item 2, Attachment 1
Meeting Summary for October 9, 2002
October 23, 2002

Present:

County: Supervisor Sally Kurtz, Chairman
Supervisor Eleanore Towe

Town Representatives: Tom Mason, Town of Leesburg
Charles Hartgrove, Town of Middleburg
Martin Kloeden, Town of Purcellville
Kelly Yost, Town of Round Hill

Absent: Supervisor Jim Burton
The Honorable Keith Reasoner, Town of Hamilton
The Honorable Steve Morgart, Town of Hillsboro
The Honorable Kristin Umstattd, Town of Leesburg
Robert Noe, Town of Leesburg
The Honorable Elaine Walker, Town of Lovettsville

Call to Order

Sally Kurtz, Chairman, called the meeting to order, which was followed by introductions from the Town representatives, staff and members of the public.

Mrs. Kurtz announced the meeting dates that will follow tonight's meeting, Wednesday, October 23 and November 20th. Both of these meetings will be held in the Aspen Room at Trailview Court in Leesburg beginning at 6 p.m. Directions will be forwarded to all members.

Item 2 – Follow-up to September 25th Meeting-Questions/Issues

The meeting summary of the September 25th meeting summary was accepted as presented.

Richard S. Weber, Director of the Office of Solid Waste Management, noted that Tom Mason, Leesburg representative, had submitted a list of questions related to items used to calculate the recycling rate. This was presented in Item 2, Attachment 2 of the meeting packet.

At the last meeting, the Committee had asked about the cost impacts on the Towns' collection contracts of adopting the County Solid Waste Ordinances. Mr. Weber provided a response to this question, which is outlined in Item 2, Attachment 3 of the meeting packet.

At the previous meeting, Craig Stuart-Paul of Fairfax Recycling, Inc., provided comment on his company's interest in expanding their operations in Loudoun County. A letter regarding this matter is provided in Item 2, Attachment 4 in the meeting packet.

Mr. Weber reported that since the previous meeting, two letters had been received from private sector providers of solid waste services: Fairfax Recycling and AAA Recycling and Trash Removal Services. Both of the letters describe a public-private partnership with the County to establishment a centrally located recycling facility. Staff's assessment of this issue was provided in an addendum to Item 2, Attachment 4, and was distributed at the Committee meeting.

Discussion ensued on the issue of a recycling facility and its impact on the towns' contracts. Mr. Weber explained that this type of facility could lower the costs and allow for more vendors' participation.

Mrs. Towe suggested that staff pursue this proposal if this meant cost savings and would help the towns.

Tom Mason, Town of Leesburg, believes that it would be a good idea; however, the Town would need more information to include in the contract and might require an amendment to the contract depending on the timing of the contract award and the opening of the facility.

Discussion continued on the schedule of pursuing this proposal. Staff responded it would take roughly a year, considering the procurement process, construction schedule, and permit requirements.

Comments from the other town representatives were in favor of pursuing the idea of a public/private partnership recycling facility.

Craig Stuart-Paul of Fairfax Recycling, Inc., provided comments on the timeline for completing this type of facility. He indicated that construction of the facility would take 3 to 6 months and discussed the recycling process that would be used in the facility.

Mrs. Kurtz agreed with Mrs. Towe on pursuing this proposal and asked staff to start working on the details of what is involved.

Mr. Weber continued review of issues outlined in the Addendum to Item 2, Attachment 4. This included the impact of Fairfax Policy decisions on Loudoun MSW flow/capacity. He also reported on the issue of construction waste disposal capacity. This issue will be part of tonight's discussion as Issue 6 in System Deficits, with options for the Committee's consideration.

Item 2 – Summary of Recycling Policy Discussion

Mrs. Kurtz asked for comment on the summary of straw votes taken on Options 1-12 at the September 25 meeting as provided in Item 3 of the meeting packet. The summary of the Committee's positions on these various issues was accepted unanimously as presented.

Mrs. Towe inquired about statement 12, which was the possibility of distributing information about County solid waste policies, especially recycling, via students in the public schools. She asked if there were grants available that could be pursued and how to get the message out and/or are there groups that might want to work on this issue.

Mr. Weber responded to this and discussed the various programs available in the elementary schools through the Bluemont Concert Series and the Litter Grant that the County uses. He stated the key is to standardize – for everyone to get the message. He added that the County has made a great start in the recent ordinance amendments. Discussion continued on this issue.

Kelly Yost, Town of Round Hill, asked about the impact of the public-private recycling facility and statement 10 which is to develop a recycling dropoff center plan for co-locating DOCs in countywide plan.

Mr. Weber responded to this question indicating that a contract amendment would be considered should a public/private recycling facility be approved as part of the DOC contract.

Non-Votes in Recycling Issue 2 (from September 25th meeting)

Staff asked for clarification on the non-votes on the following options:

1. Funding additional DOC sites is not a current priority due to budget constraints.

Mrs. Towe discussed the issue of no western Loudoun DOC sites. She reviewed the problems of not finding a suitable site in the Purcellville area. She indicated that during the Board's FY04 budget review, she would bring forward a request for funding a site now available on property leased by the School Board.

Martin Kloeden, Purcellville, agreed with Mrs. Towe on the need for a DOC site in the Purcellville area.

The Committee voted 0-5-1 (Yost abstaining)—i.e., do not recommend this option.

2. Develop a capital improvement and funding schedule to construct and operate DOCs for immediate needs in the Purcellville area to replace three sites lost in 1995 and for immediate needs in the Ashburn and South Riding areas.

Following discussion on this option, the Committee voted to amend and approve this option unanimously (6-0) as follows:

Develop a capital improvement and funding schedule to construct and operate a DOC for immediate needs in the Purcellville area, which replaces three sites lost in 1995. The Committee further recommends continuing maintaining current operations at existing DOC sites.

3. Develop a capital improvement and funding schedule to fully implement the County's current recycling policy.

The Committee reaffirmed that its vote on this option was 0-6.

At this point in the meeting, the Committee took a short break.

Item 4 – Continuation of Staff Presentation of Solid Waste System Issues and Options for Consideration by the Committee

Jane Tatum, Office of Solid Waste Management, reviewed this section, which addresses the solid waste management system deficits.

Issue 1 - Should the Board take actions that would establish a more level playing field and stimulate competition among solid waste service providers?

Options:

1. Do not address this issue at this time and allow resolution by market forces.
2. Revise the tipping fee rates at the LCSWMF to foster more competition.
3. Permit additional transfer facilities for MSW.
4. Enter into a contract with the private facility.

Staff noted that the Board has set its capacity requirements and that the County is already in the marketplace. The SWMP is where this issue needs to be addressed. If the current model is to work, there should be one facility and no competition. Should a public-private venture be determined, there would still be some control.

Following discussion, the Committee requested that this be tabled and asked that staff prepare information on capacity, timelines and at what point is tonnage lost, etc.

(Mr. Hartgrove left the meeting at this time.)

Issue 2 – How will the Board ensure that adequate facilities exist to support recently enacted yard waste recycling requirements?

Staff noted that a deficit in yard waste capacity might compromise the Board's efforts to improve the level of yard waste recycling. At this time, this matter is not an issue. Therefore, no options are necessary. The Committee accepted staff's recommendation.

Issue 3 – How will the Board ensure the available capacity of the current solid waste management system (facilities) to handle all generated waste?

Options:

1. Establish a method and schedule (every 2-3 years) for reviewing solid waste facility capacity for MSW, CDD, and vegetative waste (assuming that most solid waste will continue to be transferred out of the County).
2. Establish a plan to permit additional facility capacity for existing or new facilities in accordance with 9 VAC 20-130-10 et. seq.
3. Explore options for mechanisms to ensure that Loudoun County facilities give priority to solid waste generation in Loudoun County.

Discussion continued on the varied options.

Mrs. Kurtz asked for straw votes: approval of all three options?

On options 1-3: 5-0-1 (Hartgrove absent for the vote).

Discussion continued on the options and the issue of establishing a schedule and amending the permit.

Following this discussion, the motion was withdrawn and the Committee voted 5-0-1 (Hartgrove absent for the vote) for options 1 and 3 together. The Committee voted 0-5-1 (Hartgrove absent for the vote) for option 2.

Issue 4 – What are some waste reuse and exchange options to be pursued by the District?

Options:

1. Identify and enlist a non-profit organization, community service agency, or other interested group with some interest and expertise in materials reuse and exchange to conduct a resource availability and needs assessment for waste reuse and exchange.
2. Identify and enlist a non-profit group or groups that can establish a network of communication for waste reuse and exchange.

3. Establish funds to provide staffing/contract resources to County solid waste efforts to develop a web-based waste reuse, waste exchange bulletin board and links to related resources.
4. Establish feasibility for a materials exchange warehouse location in the County for used goods, building supplies and other materials available to non-profit agencies and organizations.

Mrs. Towe commented that options 1 and 2 appear feasible but 3 and 4 would require funding that is not available. Discussion continued on examples of 1 and 2, which include groups such as Good Will and Salvation Army. The Committee raised concerns regarding the management of these efforts. The Committee members commented that non-government management would be preferred but there was some concern that there may still be some cost with options 1 and 2. The Committee also agreed that the concept of reuse is good and should be included in the plan. Discussion continued on this issue.

Mrs. Kurtz called for the vote. On Options 1 and 2, 5-0-1 (Hartgrove absent for the vote). On Options 3 and 4, 0-5-1 (Hartgrove absent for the vote).

Issue 5 – What are some options for ensuring solid waste collection services in rural areas?

Options:

1. Do not address this issue at this time.
2. Provide an incentive to small independent collectors (defined in Chapters 1084 and 1086 of County Codified Ordinances as “minor” collectors) through a reduced Landfill disposal fee.
3. The County could study the need to establish one or more solid waste service districts and manage the contracts for solid waste collection services to households in the service district for rural areas.

The Committee discussed the issue of the small hauler in the rural areas of the county and incentives that could be used to encourage these haulers. Staff will confer with the County Attorney on potential legal issues associated with this matter as well as provide information on the percentage of tonnage that is received from smaller haulers. The Committee also discussed concerns with the option of establishing a service district and management of contracts for collection services in the service districts for the rural areas. They concluded that this might be something for a future plan.

Mrs. Kurtz called for the vote. Options 1 and 2 were tabled by a vote of 5-0-1 (Hartgrove absent for the vote). On Option 3, 0-5-1 (Hartgrove absent for the vote).

Issue 6 – Assess the district’s status in regional construction/demolition and debris (CDD) waste generation, recycling and disposal.

Options:

1. Continue to depend on private sector to transfer CDD waste out of the County and assume that the capacity is available.
2. Establish a CDD waste reduction, reuse and recycling initiative to elevate management of at least a portion of these materials on the waste management hierarchy.
3. Propose and help fund a regional CDD waste generation/characterization study and needs assessment with options and recommendations through the Northern Virginia Regional Commission (NVRC) or the Metropolitan Washington Council of Governments (MWCOG).
4. Fund a Countywide study of CDD waste generation/characterization study and needs assessment with options and recommendations for action.

Staff responded to questions related to the impact should facilities stop accepting CDD waste and review of the state requirements. Staff also discussed the “green building” concept and how this might be considered in the next update of Zoning Ordinance amendments and the Facilities Standard Manual.

Mrs. Kurtz called for the vote. On Option 1, 0-5-1 (Hartgrove absent for the vote)—i.e., do not recommend this option. On Option 2: Tabled by the Chair. On Option 3: Strike the language “and help fund,” 5-0-1 as amended (Hartgrove absent for the vote). On Option 4: 0-5-1 (Hartgrove absent for the vote)—i.e., do not recommend this option.

Next Meeting

The third and final set of issues, Emergent Trends, will be addressed at the Committee’s next meeting scheduled on October 23 at 6:00 p.m. in the Aspen Room, 906 Trailview Blvd., in Leesburg. The issues were identified in Item 5C in the September 25 packet.

Adjourn

There being no further business to come before the Committee, the meeting was adjourned.

**Loudoun County Ad Hoc Solid Waste Management Plan Committee
Item 2: Meeting Summary for October 23, 2002
November 20, 2002**

Present:

County: Sally Kurtz, Chairman
Eleanore Towe
Jim Burton

Town Representatives: Tom Mason, Town of Leesburg
Martin Kloeden, Town of Purcellville
The Honorable Keith Reasoner, Town of Hamilton

Absent: Charles Hartgrove, Town of Middleburg
The Honorable Steve Morgart, Town of Hillsboro
The Honorable Kristin Umstattd, Town of Leesburg
Robert Noe, Town of Leesburg
The Honorable Elaine Walker, Town of Lovettsville
Kelly Yost, Town of Round Hill

Call to Order

Sally Kurtz, Chairman, called the meeting to order, which was followed by introductions from the Town representatives, staff and members of the public.

The meeting summary of October 9 was accepted as presented, 5-0-1 (Burton abstaining due to absence on October 9).

Chairman Kurtz announced a departure from the order on the Agenda and requested staff to present the Emergent Trends first to ensure that the Committee completed that portion of the agenda.

Staff Presentation of Solid Waste Issues – Emergent Trends

Monica Gorman of the Office of Solid Waste Management provided an overview of the Emergent Trends issues in the current solid waste management system with options for the Committee's consideration.

Issue #1 – Should consistency between the Zoning Ordinance and the Solid Waste Management Facilities Ordinance with regard to solid waste be a priority?

Mr. Burton raised a question concerning the timing of the Zoning Ordinance revisions as it relates to solid waste management facilities and whether this should be included during the first phase of the zoning ordinance revisions.

Discussion continued on this issue.

Staff was asked to prepare a memo to the Board of Supervisors to address the most significant of the inconsistency issues between the Zoning Ordinance and Chapter 1080 for consideration in the current Zoning Ordinance revision process.

Options:

- 1 – This is not an issue
- 2 – Add consistency review and revision as needed to zoning ordinance time table (with date)

Straw votes cast:

Option 1 – 0-6

Option 2 – 6-0

Issue #2 – What are some options for handling increasing types and amounts of special wastes?

Ms. Gorman reviewed the background on this issue.

Options:

- 1 – Maintain current level of service for County funded special waste programs.
- 2 – Expand waste oil and other special waste collection to a regional site in the Western and one in the Eastern parts of the County.
- 3 – Provide more routine (e.g., monthly) HHW collection events.
- 4 – Help source reduction and reuse of special wastes via comprehensive public education for purchasing, handling, storing and disposal of special wastes in residential and non-residential settings.
- 5 – Construct a permanent HHW facility for routine acceptance of special wastes, expand collection sites, and train personnel or contracted services to manage increasing waste types and volumes.

Staff responded to questions related to the traffic volume at the HHW, answering that there are approximately 400 cars per event at 6-7 events per year. Staff also discussed the locations of the events throughout the county.

Staff commented that one of the main HHW problems is the disposal of waste oil.

The Committee commented on the various options but raised concern for cost of expanding program due to limited funds.

Straw votes cast:

Option 1 – 0-6

Option 2 – 6-0

Option 3 – 6-0

Option 4 – 0-6

Option 5 – 0-6

Issues #3 – What can the Solid Waste Management Planning District do to ensure an adequate response to solid waste/debris disasters?

Ms. Gorman reviewed the options for this issue.

Options:

- 1 – Do not address this issue at this time.
- 2 – Procure pre-approval of an emergency solid waste/debris site(s) from VADEQ.
- 3 – Establish mutual aid agreements with other Northern Virginia jurisdictions.
- 4 – Include SWM planning as an element in the County's emergency management plan.

The Committee discussed the options. Staff responded to Mrs. Towe's question regarding Option 2, on the process of pre-approval. Mr. Weber noted that the County has a permitted site but staff would require Board authorization to pursue a pre-approval for an emergency solid waste/debris site with DEQ.

Straw votes cast:

Option 1 – 0-6

Option 2 – 6-0

Option 3 – 6-0

Option 4 – 6-0

Issue #4 – Does the County want to regulate unauthorized dumping of waste dirt and/or the accumulation of waste dirt in surface piles by persons that accept dirt for a fee?

Ms. Gorman reviewed the problems of unauthorized dumping in the County of waste dirt from land clearing and development activities.

Options:

- 1 – Do not address the issue at this time.
- 2 – Amend Chapter 1080 and the Zoning Ordinance to restrict unauthorized dumping of waste dirt.
- 3 – Amend Chapter 1080 and the Zoning Ordinance to regulate surface piles of waste dirt.
- 4 – Amend Chapter 1080 and the Zoning Ordinance to regulate soil processing.

Mrs. Towe commented that she supports Options 2, 3 and 4 as the problem of waste dirt is a safety issue and has become a problem with property owners.

Mr. Burton inquired as to whether or not the draft Zoning Ordinance provides for this as a permitted use.

Mr. Weber responded that he was not aware of this language.

Mr. Burton commented that he would like to see this language added in this phase of the Zoning Ordinance revision.

Discussion continued on this issue with this added use.

Mr. Burton added that he would support Options 2, 3 and 4 if language could be added into the draft Zoning Ordinance regarding this matter.

Straw votes cast:

Option 1 – 0-6

Option 2 – 6-0

Option 3 – 6-0

Option 4 – 6-0

Issue #5 – Does the Board want to prohibit burning of solid waste by residents?

Ms. Gorman reviewed the options for this issue.

Options:

1 – No change to current regulations.

2 – Recommend that the Board amend Chapter 1080 to prohibit the burning of MSW.

3 – Recommend that the Board amend Chapter 1080 to prohibit the burning of yard waste.

Mr. Burton stated that he supports Option 2 but has a problem with Option 3 in the rural areas.

Mrs. Towe agreed and asked about the Fire Marshal's opinion on Option 3.

Discussion continued on the issue of burning yard waste in some areas but not in others and the ruling from the Fire Marshal on this matter.

Mr. Burton suggested that language be added to continue burning in certain areas and that staff check with Fire-Rescue Services on their regulations on burn restrictions.

Straw votes cast:

Option 1 – 0-6

Option 2 – 6-0

Option 3 – Tabled until clarification and follow-up from staff.

Issue # 6 – How will the district ensure that the SWMP is implemented and updated in a dynamic solid waste environment?

Ms. Gorman provided a brief overview of this issue and provided the following options:

Options:

- 1 – Maintain status quo and continue to rely upon national averages to estimate generation of waste types in the absence of specifically reported levels.
- 2 – Establish an annual SWMP review process.

The Committee amended Option 2 for biennial reviewing, commented that one year was too soon.

Straw votes cast:

Option 1 – 0-6

Option 2 – 6-0 (As amended for biennial review)

Item #7 – What opportunities exist for the County and the Seven Incorporated Towns to partner to achieve and sustain effective solid waste management?

Ms. Gorman reviewed the options for this issue.

Options:

- 1 – Do not pursue any further policy or program options at this time.
- 2 – Towns could adopt Chapters 1080, 1084 and 1086 to extend uniform enforcement of the County's solid waste management ordinances.
- 3 – Towns and county could develop joint contracts for solid waste services and other best practices implementation.

Straw votes cast:

Option 1 – 6-0

Option 2 – 0-6

Option 3 – 0-6

(At this point in the meeting, the Committee took a break)

Follow-up from October 9 Meeting

Rick Weber reviewed the letter submitted by Buff Mundale of American Disposal Services regarding the lack of a level playing field for collection companies and lack of local recycling infrastructure to support recycling requirements. (See Attachment 2 to Item #2 in the packet.)

Chairman Kurtz commented on the request for information to Loudoun Environmental Indicators Project (LEIP). She further noted how beneficial LEIP is to the County and to request they include in their work how much clearing of land is lost.

Mrs. Towe seconded this request.

Mr. Weber noted that the issue of economic incentives for small haulers is under review by the County Attorney who asked that more time would be needed to complete this review.

Analysis of Tipping Fees and Disposal Consumption at the Landfill

Staff provided an overview on the impact of a lower tipping fee and the life span of the landfill capacity. This information included an assessment developed by the County's solid waste engineering consultant, Solid Waste Services, (SWS). Four tipping fee scenarios were presented and are outlined in Item 4 of the meeting packet.

Discussion on this issue continued.

Mr. Burton commented that lower fees at County for small haulers would be good.

Buff Mundale, American Disposal Services, commented that it would increase the volume at a lower price and would be better for larger haulers. He also commented on the alternatives that small haulers have.

Staff reviewed the graph that provided waste flow and tipping fee scenarios.

Discussion continued on the impact on capacity with the lower tipping fee. The Committee also discussed keeping the landfill operations "revenue neutral".

Following this overview and discussion, the Committee asked that this issue come back at the next meeting for further discussion.

Information on Public-Private Partnership Recycling Depot at the Landfill

Staff provided the background on this issue that was discussed at the October 9 meeting. As previously discussed, this facility could be located at the County's landfill. Staff reviewed the permitting, construction and operations issues related to this proposed facility. (See Item 3 of the meeting packet)

The Committee discussed the issue of the impact on current drop-off centers, increased truck traffic, oversight and regulations.

The Committee asked staff to prepare additional information and to bring this back for further review. This information would include other sites that currently operate in this capacity in other parts of the state.

Summary of Issues Discussion for Recycling and Solid Waste Management System Deficits

This item (#5 in meeting packet) provided a summary of straw votes on options for each of the above noted areas. The Committee confirmed their positions on Options 1-4 for the SWM System Deficits.

The Chair tabled the landfill tipping fee issue pending further information at the next meeting (Option 1). In addition, the economic incentive for small haulers issue is still under review by the County Attorney and will be reported at the next meeting.

Next Meeting

The next meeting of the Committee is scheduled for Wednesday, November 20 at 6 p.m. at Trailview Blvd., Leesburg. The Committee discussed the public input session for their December meeting. *(Following discussion with Chairman Kurtz and staff, this session is planned for December 11 in the Board of Supervisors' Meeting Room.)*

Adjournment

There being no further business to come before the Committee, the meeting was adjourned.

**Loudoun County Ad Hoc Solid Waste Management Planning Committee
Item 1: Meeting Summary for November 20, 2002
January 22, 2003**

Present:

County: Sally Kurtz, Chairman
Eleanore Towe
Jim Burton

Town Representatives: Tom Mason, Town of Leesburg
Martin Kloeden, Town of Purcellville
The Honorable Keith Reasoner, Town of Hamilton
Charles Hartgrove, Town of Middleburg
The Honorable Elaine Walker, Town of Lovettsville

Absent:

The Honorable Steve Morgart, Town of Hillsboro
The Honorable Kristin Umstattd, Town of Leesburg
Robert Noe, Town of Leesburg
Kelly Yost, Town of Round Hill

Call to Order

Sally Kurtz, Chairman, called the meeting to order, which was followed by introductions of the Town representatives, staff and members of the public.

The Committee voted unanimously to approve the meeting summary from the October 23rd meeting.

Wrap-Up of Questions/Issues

Staff reviewed the pending issues and presented followup as previously discussed at the October 23rd meeting. The issues and recommendations on each are provided below:

(Please reference the meeting materials from the November 20th packet labeled Item 3A-3E for detailed information.)

A. Actions for Revenue-Neutral Landfill Operations

The Committee voted 7-0-0 on option 1 (*Towe moved motion and Burton seconded the motion*) to recommend that the Board of Supervisors amend their operating policy for the County Solid Waste Management Facility by deleting the

current policy statement on the level of facility operations and replacing with the following:

Delete the current policy statement on level of facility operations:

The Landfill will operate as public service and will not seek to compete for waste. As such, it provides important option / alternative to prevent the County from relying on sole source providers of solid waste services.

Add a revised operations level statement as follows:

The County Solid Waste Management Facility will operate six days a week (M-S) to provide an important solid waste management and disposal option to prevent the County, residents, and businesses from relying on sole source providers of solid waste services. The County Administrator is charged with achieving a workable balance between conservation of permitted disposal capacity, and revenue neutrality among tipping fee revenue, operations costs, and capital construction costs.

The Committee voted 7-0-0 on option 2 (*Towe moved motion and Burton seconded*) to authorize the County Administrator to develop a plan consistent with the guidelines, and to adjust the tipping fee within the range, according to Attachment 2, Item 3A (attached to this meeting summary as Attachment 1.)

B. RFP for Public-Private Partnership Recycling Transfer Station at Landfill

The Committee voted 7-0-0 on option 3 (*Towe moved motion and Burton seconded*) to recommend that the Board of Supervisors direct staff to prepare and issue an RFP by July 1, 2003, consistent with Item 3B, Attachment 1 and the Public-Private Education Facilities and Infrastructure Act of 2002 once implemented by the Board.

C. Incentives for Minor Haulers

The Committee voted 7-0-0 on option 2 (*Towe moved motion and Burton seconded*) to recommend that, in the absence of other fee reductions, the Board of Supervisors adopt a reduced tipping fee for Minor Collectors provided that they hold a County permit in good standing. This reduced tipping fee would not be available to Minor Collectors operating under contract to a Major Collector. The votes for options 1 and 3 were 0-7 against.

D. Regulations on Open Burning of Yard Waste

The Committee voted 6-0-1 (Mayor Walker abstained) on option 1 as amended (*Towe moved motion and Burton seconded*) to recommend that the Board of Supervisors amend Chapter 1080 and other County ordinances as appropriate to prohibit the burning of construction waste and/or vegetative waste (including yard waste) generated offsite.

E. Zoning Ordinance and Chapter 1080 Conformance Issues

The Committee voted 7-0-0 on option 2 as amended (*Burton moved motion and Towe seconded*) to recommend that the Board of Supervisors make the staff-recommended list of items a priority during Phase II of the Zoning Ordinance revision process, with the exception that in Phase I will be technical input into the Permitted Use list for Dirt Dumps and an appropriate list of performance standards.

Final Review of Chapters 1-4 and 7

The final draft chapters 1-4 and 7 were presented and accepted by the committee. No comments were given on these chapters.

Chapter 5 – Goals and Objectives

Committee members discussed goal #4 – recycling rate above 25%. The committee also added goal 5 to support proper disposal of household hazardous waste in order to protect public safety health and welfare as well as the environment.

The committee voted 7-0-0 to recommend approval of Chapter 5 as amended.

Chapter 6 – Implementation of SWMP

Staff responded to questions related to page 6-2 (Section 6.1.3 Emergency Preparedness) and page 6-7 (Section 6.4.2.4 – Household Hazardous Waste and Business Hazardous Material) clarifying the number of annual HHW events from 7 to 12. This chapter was accepted as presented.

Rick Weber, Director of OSWM, reviewed the implementation plan status quo elements on the various categories to include: collection, disposal, recycling and reuse, environmental, planning and public information.

Mr. Burton suggested that language be clarified to state that after “landfill” in #4 of Disposal section that the following be added: “(as opposed to incineration or other methods)”. This change was accepted by the committee.

Elaine Walker commented on #18 under the section "Planning and Public Information" (Status Quo) and that the "towns" be included to show there is a cooperative effort on their part and did not understand why they are not mentioned throughout the plan.

Mr. Weber responded to this and indicated that there are certain portions that are referred to as "county" due to Board policy. However, he pointed out that all of the towns along with the County are one district. Therefore, towns are included when language refers to "district".

Discussion continued on this and the issue of the County's regulations for trash haulers and their contractual arrangement with the towns.

Mr. Weber suggested language that would provide that OSWM staff would serve as a resource to all district members, if requested. This language will be added in the planning and public information section.

Steve Cawthron suggested that in the "Recycling and Reuse" Status Quo section #8 that the word "District" replace the word "County's" and would read as follows:

"8. The County will support private sector vegetative waste processing and yard waste composting to enhance the District's ~~County's~~ recycling efforts."

This change was accepted by the Committee.

Implementation of Immediate Action and Future Initiatives

Mr. Weber reviewed these sections.

Under "Recycling and Reuse", # 4, Tom Mason suggested that the word "District" replace the word "County". This change was accepted by the committee. It was also noted that the change "all appropriate public facilities" be added in the "Recycling and Reuse" section. This amendment was accepted by the committee.

The final vote on the action plan as amended was approved 7-0-0.

Staff responded to question raised by Mayor Walker regarding state requirements enforced by the County.

Addendum to Chapter 5

As discussed earlier tonight, language was suggested to be included as follows: Goal 5 – “To provide safe recycling and disposal options for special wastes that may pose harm to the environment and/or to public health and safety.” Related objectives were also provided. The Committee accepted this as amended.

Chapter 8 – Description of Public Process

This chapter was accepted as presented.

Next Meeting

The next meeting of the committee will be the public input session, which is scheduled for December 11, 2002. Representatives from the solid waste industry, community and government will be invited to attend this session. This session will be designed to receive comment on the SWMP and the committee’s proposed recommendations on continued current action; immediate action steps and future planning efforts.

Adjournment

There being no further business to come before the committee. This meeting was adjourned.

(A digital recording of this meeting is available in the County Administrator’s Office.)

Attachment 1: Guidelines for Tipping Fee Changes to Achieve Revenue Neutral Operations

**Loudoun County Ad Hoc Solid Waste Management Planning Committee
Item 1: Meeting Summary for November 20, 2002**

**Attachment 1: Guidelines for Tipping Fee Changes
to Achieve Revenue Neutral Operations**

January 22, 2003

The following guidelines are established for considering tipping fee reductions at the County Solid Waste Management Facility. The dual objectives of such reductions are 1) to make County Landfill disposal operations revenue neutral, and 2) to avoid accelerating consumption of permitted disposal capacity. To achieve a balance between the two goals, several parameters are suggested for consideration:

- 1) The Office of Solid Waste Management shall develop an implementation plan subject to the approval of the County Administrator that will ensure that both objectives remain balanced. This plan would contain action steps should undesired events or actions occur as a result of the reduction of tipping fees.
- 2) All per ton fees will be in whole dollar amounts.
- 3) The tipping fee for customers other than County permitted haulers remains at \$55.00 per ton for all weighed waste including MSW.
- 4) There will be a minimum transaction fee of \$2.00 established for all transactions at the facility.
- 5) The fee for non-compacting rolloff containers, dump trucks, and demo trailers transporting construction and demolition waste will remain stay at \$55 per ton of waste. These types of vehicles are used extensively to haul construction and debris waste that is bulky and fills disposal space much faster than MSW.
- 6) The facility would reopen on Mondays, and 5 additional positions (FTEs) are authorized. These costs are included in the financial analysis.
- 7) Minor haulers holding valid County issued collection permits would be offered a tipping fee of \$47 per ton of MSW only and would not be required to contract with the County.
- 8) Major haulers holding valid County issued collection permits would be offered a tipping fee of \$47-52 per ton of MSW only and would be required to enter into a put or pay contract with the County that would limit the amount of waste that could be brought to the facility at that rate.
- 9) All tipping fee revenues above annual operating costs would be placed in a dedicated non-reverting fund and reserved to offset future capital construction costs.

Loudoun County Ad Hoc Solid Waste Management Plan Committee Item 2: Meeting Summary for January 8, 2003 Public Input Session January 22, 2003

Present:

County:

Sally Kurtz, Chairman and Supervisor,
Catocin District
Eleanore Towe, Supervisor, Blue Ridge
District
Jim Burton, Supervisor, former Mercer
District

Town Representatives:

Tom Mason, Town of Leesburg
Martin Kloeden, Town of Purcellville
The Honorable Keith Reasoner, Town of
Hamilton
Charles Hartgrove, Town of Middleburg
Kelly Yost, Town of Round Hill

Public Input Session Participants:

Doug Atcheson, BFI Winchester
Gem Bingol, Piedmont Environmental
Council
Bill Brown, B&B Refuse
Shirley Brown, B&B Refuse
Steve Cawthron, Woods Road Special
Exception Review Committee
Steve Epstein, CSI Inc.
Jack Freeman, Blue Ridge Condo
Association
Susan Gleba, AAA Recycling
Steve Loftus, Woods Road Special
Exception Review Committee

Dorn McGrath, George Washington
University, LEIP
Conrad Mehan, BFI
The Honorable Paul Miller, Vice-Mayor,
Town of Lovettsville
Buff Mundale, American Disposal
John Myers, Myers Farm
Shirley Pearson, Keep Loudoun
Beautiful
The Honorable Karl Phillips, Council
Member, Town of Purcellville
Ed Warmus, BFI Northern VA
Dave White, Waste Management Inc.

Absent:

The Honorable Steve Morgart, Town of Hillsboro
The Honorable Kristin Umstatt, Town of Leesburg
Robert Noe, Town of Leesburg
The Honorable Elaine Walker, Town of Lovettsville

Call to Order

Sally Kurtz, Chairman, called the meeting to order. After introducing members of the Committee and recognizing other attendees, Ms. Kurtz outlined the purpose of the meeting. She noted that the State requires solid waste management planning, that the Committee has met since September and has developed recommendations for updating the Loudoun County Solid Waste Management District's Plan, and that the purpose of tonight's meeting is for the participants to review and react to the Committee's recommendations. She also noted that tonight's meeting is an extra public input session and that additional comments can be made in writing to the Committee and in an upcoming formal Public Hearing of the County Board of Supervisors.

Ms. Kurtz introduced Dick McAffery of McAffery Associates who outlined the process for the evening's group discussions as a chance for the citizen, government and industry representatives present to be informed of the Plan's key elements, to react to the proposals before they are finalized, and to propose additions, deletions or changes. He further explained that there would be five staff presentations on the topics of collection, disposal, recycling, environmental protection, and policy and public information. Each presentation was to be followed by a small group discussion of the Ad Hoc Solid Waste Management Planning Committee's recommendations for activities or policies in place that will continue (status quo), immediate or near-term actions recommended, and long-term recommendations.

The meeting continued with each of the five presentations and group discussions conducted in four small groups. The small groups consisted of

- a facilitator whose role was to keep the group on track to finish in the allotted time and to ensure that each participant had an opportunity for input,
- a staff member whose role was to clarify terms and to respond to technical questions regarding the recommendations or the plan,
- a recorder whose role was to capture the feedback from the group, review the major points with the group at the end of each discussion, get the group's consensus on the major points, and to transmit the notes for further summarization and consideration by the Committee, and
- the participants who were invited to provide input to the recommendations.

Committee members listened and moved among groups to hear as many points from the four groups as possible. Additional solid waste management were also roving to assist groups with questions and to clarify terms and technical points.

After the presentations and discussions were complete, Ms. Kurtz asked the Committee members present to react to what they heard and each gave a summary comment. A summary of each group's discussion and suggestions to the Committee is included as **Attachment 1**.

Next Meeting

The next meeting of the Committee is scheduled for Wednesday, January 22, 2003 at 6 p.m. in the Lovettsville Room of the County Government Center, 1 Harrison Street SE, Leesburg.

Adjournment

The purpose of the meeting was completed and after the next meeting date was announced, the meeting was adjourned.

Attachment 1 – Major Discussion Points of Groups 1, 2, 3 and 4 - January 8 Public Input Session

**Loudoun County Ad Hoc Solid Waste Management Planning Committee
Item 2: Meeting Summary for January 8, 2002**

**Attachment 1: Recorders' Notes from Individual Group Discussions
at Public Input Session**

January 22, 2003

The following are the recorders' notes to the four (4) groups who participated in the Solid Waste Management Planning Committee's Public Input Session.

Group 1: 3 pages Attachment 03-01-12A
Group 2: 3 pages Attachment 03-01-12B
Group 3: 3 pages Attachment 03-01-12C
Group 4: 3 pages Attachment 03-01-12D

PUBLIC INPUT PROCESS
Ad Hoc SWMP Committee
January 8, 2003

RECORDER NOTES
Group #1

Facilitator: Gena Davis
Technical Advisor: Kate Glass

Recorder: Mike Ball

1. Collection Presentation and Discussion

A. Clarification Questions Answered Satisfactorily

- How do the Towns co-adopt County ordinances?
- Would landfill rates increase or decrease?
- What does the term "C&D" mean?

B. Questions Raised that were Not Satisfactorily Answered

- Who is responsible for the trash that blows out of dumpsters at a construction site or DOC?
- What are the County's special collection requirements?

C. Suggestions/Comments by Group

- One participant, a large hauler, stated his company offers recycling to its customers. It is the customer's responsibility, to initiate the use of this service. (1 of 4)
- One participant, a large hauler, considers its responsibility limited to hauling their customer's solid waste. The hauler picks up their customers solid waste and delivers it to a landfill site. It is the site's responsibility to separate the recyclable material from the trash. (1 of 4)
- Town contracts should state the minimum levels of service for collection and recyclables. (1 of 4)

2. Disposal Presentation and Discussion

A. Clarification Questions Answered Satisfactorily

- What does the term "out-of-district" mean?
- How would a regional study be more complete than a study performed just for Loudoun County?
- What is the "region"?
- What is the status of Cell IIIA?

B. Questions Raised that were Not Satisfactorily Answered

(There were no questions that were not satisfactorily answered)

C. Suggestions/Comments by Group

- “Recycling” should be the primary method for handling MSW. “Disposal” should be the second choice for getting rid of MSW, C&D, etc. (1 of 4)
- Individuals should be held to the same anti-litter and tarping standards as haulers. (2 of 4)
- A reduction to \$47.00 per ton for C&D will not result in additional C&D waste being brought to the Facility. Most other C&D facilities charge \$22.00 to \$32.00 per ton. (1 of 4)

3. Recycling and Reuse Presentation and Discussion

A. Clarification Questions Answered Satisfactorily

- Who hauls from the DOC?
- When will ordinance 1086 be effective?
- How does the County support private sector vegetative waste processing?
- Is there a site for this DOC in the Purcellville area?
- What is a public/private partnership?
- What is being done to ensure future recycling areas are located in new development?
- How is the County addressing its future recycling needs?
- What does the term “recycling rate” mean?

B. Questions Raised that were Not Satisfactorily Answered

(There were no questions that were not satisfactorily answered)

C. Suggestions/Comments by Group

- The general consensus was the Internet-based waste exchange “sounds great”, but concerns were raised regarding how do you implement/manage it”. (4 of 4)
- The County and Town members need to work towards consistent recycling and solid waste management. Anything that can improve recycling is good. (1 of 4)
- Improve communications about solid waste and recycling to ensure that this information gets to the correct people. (4 of 4)
- OSWM should continue to provide public information and education and promote recycling and source reduction. (1 of 4)

4. Environmental Protection Presentation and Discussion

A. Clarification Questions Answered Satisfactorily

- What environmental systems are at the Landfill?
- Will the County continue assisting Towns regarding solid waste and recycling?
- Will annual solid waste reporting continue?

- Can waste oil be part of an HHW event?
- When can C&D waste be burned?
- What is “soil processing”?
- Is the expense of waste oil collection at the proposed remote sites similar to that at the Landfill?
- Can commercial and household hazard waste events be combined?

B. Questions Raised that were Not Satisfactorily Answered

(There were no questions that were not satisfactorily answered)

C. Suggestions/Comments by Group

- 12 HHW events per year may be too many. Somewhere between the current 7 and 12 may be more reasonable number of events and they should be concentrated in the eastern part of the County due to the larger population. (1 of 4)
- Expanding waste oil and other special collections to two regional sites is a good idea. (2 of 4)

END

PUBLIC INPUT PROCESS
Ad Hoc SWMP Committee
January 8, 2003

RECORDER NOTES
Group #2

Facilitator: Mary Margaret Meadows
Technical Advisor: Mike Fairbanks

Recorder: Teri Jackson

1. Collection Presentation and Discussion

A. Clarification Questions Answered Satisfactorily

(There were no questions asked)

B. Questions Raised that were Not Satisfactorily Answered

- What are the special collection requirements? (whole group)
- Please provide more explanation on reducing landfill rates. (whole group)

C. Suggestions/Comments by Group

- Concerns were raised that the County would not have adequate support to handle the enforcement of the ordinances if the Towns were to co-adopt them.
- Industry would like to be considered for providing solid waste and recycling services to the County, if it could be done cheaper.
- Tipping fee rates should be revised across the board. Tipping fee rates should be more competitive.
- All liked to idea of C&D being phased in as part of Chapter 1084.
- One participant felt it was difficult to provide curbside services to rural areas and be cost effective.

2. Disposal Presentation and Discussion

A. Clarification Questions Answered Satisfactorily

(There were no questions asked)

B. Questions Raised that were Not Satisfactorily Answered

(There were no questions that were not satisfactorily answered)

C. Suggestions/Comments by Group

- Would like the County to promote competition among the Solid Waste Facilities.
- Concern was raised that if the rates become competitive this would mean the landfill would be back in the "landfill business."
- Rate reduction may encourage other jurisdictions to lower their rate, in-turn neutralizing the intent of the initiative.

- Rate reduction may attract additional volumes.
- Concern was raised that market forces should be looked at frequently for Solid Waste Facilities, lowering rates for Solid Waste Facilities one time may not be adequate enough.
- Concern was raised that if NVRC or MWCOC conduct a regional C&D waste generation and characterization study, it would be difficult to track because other jurisdiction are not required to differentiate between types of waste.
- Encouraged the County to do the study if COG does not.
- The C&D waste generation and characterization study should concentrate on waste generated in the County not disposed of out of the County.

3. Recycling and Reuse Presentation and Discussion

A. Clarification Questions Answered Satisfactorily

- Needed clarification on the County Land Use Referral. Rick explained. No other clarifications required. (whole group)

B. Questions Raised that were Not Satisfactorily Answered

- How does the County meet the 25% recycling rate? (whole group)

C. Suggestions/Comments by Group

- Put more emphasis on the resident to recycle.
- Haulers should not be responsible for recycling material that has been contaminated by resident/commercial users.
- More clarification on recyclables being contaminated by resident/commercial users.
- Would like the Towns and County to support dry waste reclamation relating to construction projects.
- One participant felt that constructing a DOC in the Purcellville area and revising the comprehensive county-wide joint-use public facility plan to incorporate DOCs in all appropriate public facility sites were in conflict.
- Expressed concern that residents would rather use the DOCs than pay for curbside recycling.
- Would like to add the following to Future Initiatives: "County and Towns will support and incorporate in the Solid Waste Management Plan dry waste/C&D reclamation products which may encompass separation, processing, and/or re-application/re-use of material."
- One participant would like incentives considered for recycling additional construction material.

4. Environmental Protection Presentation and Discussion

A. Clarification Questions Answered Satisfactorily

(There were no questions asked)

B. Questions Raised that were Not Satisfactorily Answered

(There were no questions that were not satisfactorily answered)

C. Suggestions/Comments by Group

- Would like to include electronics recycling as a permanent program.
- All agreed that expanding waste oil and other special waste collection to two regional sites in the Western and Eastern parts of the County were a great idea.

END

PUBLIC INPUT PROCESS
Ad Hoc SWMP Committee
January 8, 2003

RECORDER NOTES
Group #3

Facilitator: Dave Tong

Technical Advisor: Monica Gorman

Recorder: Randy Reed

1. Collection Presentation and Discussion

A. Clarification Questions Answered Satisfactorily

- Where did the numbers used to determine the project amounts of waste in 2005 and 2025 come from?
- What are “special collection requirements” for the County? (ie: Why does the County collect waste from schools, libraries etc.?)
- Can Solid Waste be collected in Loudoun 7 days a week?
- Does Loudoun County regulate solid waste collectors?
- How would Towns go about adopting the County Ordinances, specifically Chapters 1084 and 1086?
- How do Towns currently enforce regulations/ordinances concerning trash?
- Who handles hazardous waste in the County and how is it regulated?
- Are the ordinances referred to in the slides “current” or will they be a result of the SWMP Committee’s recommendations?
- Have any Towns adopted the County’s ordinances?
- Is roadside litter (ie: animal carcasses) considered a trivial matter in regards to solid waste”?
- Does the County regulate VDOT’s collection of animal carcasses?
- Please explain the reasoning behind revising the landfill rates (with regards to Minor Haulers).
- Is there anything the County “wishes it could do” but is prevented from doing by the Commonwealth?
- Do any of the Towns have the authority to “rezone” in order to regulate solid waste collection?

B. Questions Raised that were Not Satisfactorily Answered

(There were no questions that were not satisfactorily answered)

C. Suggestions/Comments by Group

(The Group offered no Collection Suggestions)

2. Disposal Presentation and Discussion

A. Clarification Questions Answered Satisfactorily

- Does the definition of C&D include “dirt” or just building materials?
- Is the use of a Landfill in Loudoun County solely a function of ‘cost’?
- How does lowering Landfill fees affect long term consumption of landfill space?
- Would the County desire to accept out of County Trash in order to increase Landfill revenues?
- Has the County considered adjusting rates at the LF to decrease traffic, reduce public impact?

B. Questions Raised that were Not Satisfactorily Answered

(There were no questions that were not satisfactorily answered)

C. Suggestions/Comments by Group

- Loudoun County should conduct a feasibility study on alternative methods of disposal. (2/5)
- Loudoun County should examine the possibility of using “mined out quarries” as possible landfill sites in the future. (2/5)
- Loudoun County should consider asking NVRC and MWCOG to conduct a regional study on “all solid waste types”, not just C&D, also extending the deadline to beyond 2004 as that is too soon. (1/5)

3. Recycling and Reuse Presentation and Discussion

A. Clarification Questions Answered Satisfactorily

- Why did MSW recycling rates decline from 1995 to present?
- Does VA DEQ regulate specific recycling rates for specific materials?
- Do the Towns have requirements/ordinances regarding solid waste and recyclables that are similar to the County’s?
- What are the current markets like for recyclables?
- Has a schedule been set for the construction of a Transfer Station?
- Please explain an Internet-base Waste Exchange.
- Is VA currently considering increasing the 25% recycling rate?
- How do Hi-Tech firms deal with recycling of computers etc.?

B. Questions Raised that were Not Satisfactorily Answered

(There were no questions that were not satisfactorily answered)

C. Suggestions/Comments by Group

- Would the County consider implementing a special wastes program for battery types other than automotive? (1/5)
- The County should do everything in its power to bring the Towns on board with the new solid waste collection and recycling requirements, including offering subsidies. (2/5)
- The County should initiate a “Green Campaign” to reaffirm the importance of and need to recycle. (2/5)
- The convening of a Citizens Committee should be moved from a “Long Range Planning” element, to an “Immediate Action” element. (Item #11). (1/5)
- The County should convene a Business Advisory Committee with a focus on the new business recycling requirements. (Perhaps working with the Chamber of Commerce) (2/5).
- The County should initiate a public awareness campaign focusing on the need to recycle uncommon electronic goods (ie: cell phones, VCRs, power tools, special batteries, etc.) (2/5).

4. Environmental Protection Presentation and Discussion

*(Group Size Now “4” instead of “5”)

A. Clarification Questions Answered Satisfactorily

- How extensive is OSWM's groundwater monitoring program?
- Does Loudoun County play any role in disposal of radioactive wastes in the County?
- Why are there “7” HHW events?
- How big a problem is dumping of waste dirt in Loudoun County?
- Does the County have a helicopter to use for its enforcement program?
- Would a Waste Exchange program work for dirt?
- Does OSWM regulate TFI?
- If Loudoun County establishes additional (future) special waste sites, will they be “staffed”?

B. Questions Raised that were Not Satisfactorily Answered

(There were no questions that were not satisfactorily answered)

C. Suggestions/Comments by Group

- If Loudoun County does establish additional special waste collection sites, they should be staffed for environmental and safety reasons. (2/4)

PUBLIC INPUT PROCESS
Ad Hoc SWMP Committee
January 8, 2003

RECORDER NOTES
Group #4

Facilitator: Tom Ambrose
Technical Advisor: Tony Hayes

Recorder: Karen Burnett

1. Collection Presentation and Discussion

A. Clarification Questions Answered Satisfactorily

- What are the County's special collection requirements for collection of solid waste and recyclables for County Facilities?
- What are the minimum services levels for the haulers and the residents? Do the haulers and residents know what the minimum service level requirements are?
- Is the County planning on further reductions of landfill rates?
- Please explain what this means. Why is the County looking at C&D waste? Is there a potential problem?

B. Questions Raised that were Not Satisfactorily Answered

(There were no questions that were not satisfactorily answered)

C. Suggestions/Comments by Group

- Why can't private contractors collect waste generated by County Government/Facilities? (3 people out of 4)
- The Committee needs to add where the minimum service levels for haulers and residents can be found (in 1084). (4 people out of 4)
- The Committee also needs to provide a brochure/flyer to residents as to what the minimum requirements are that they should expect from their recycling contractors. (4 people out of 4)
- The haulers don't have a problem with the County having a landfill, which offers service to individuals who don't have services provided through a hauler such as in Western Loudoun County. (2 people out of 4)

2. Disposal Presentation and Discussion

A. Clarification Questions Answered Satisfactorily

- What will happen to the revenue stream if the landfill rates are decreased?
- What percentage of MSW waste currently goes out of the County?
- Do we really want to look at the region or just Loudoun County?
- Would this study only look at the present?

B. Questions Raised that were Not Satisfactorily Answered

(There were no questions that were not satisfactorily answered)

C. Suggestions/Comments by Group

- The NRRC and COG regional Study would need to look at the future not just the present and do projections for the future. (4 people out of 4)
- This group suggests the addition of element 8. Element 8 would be to look at the capacity of the one existing MSW transfer station in the community. A new MSW transfer station would receive support by both the towns and haulers in the community. (4 people out of 4)

3. Recycling and Reuse Presentation and Discussion

A. Clarification Questions Answered Satisfactorily

- How confident is Loudoun County of the accuracy on recycling reports currently provided by business' and haulers?
- Is there a date scheduled for the Board of Supervisors to pursue a recyclables transfer station at the Loudoun County Solid Waste Management Facility?
- How would the County monitor if someone were providing adequate recycling opportunities?
- Would the County Land Use Referral process ensuring that recycling standards are set and used in new developments apply to towns?
- What is an Internet based waste exchange?

B. Questions Raised that were Not Satisfactorily Answered

(There were no questions that were not satisfactorily answered)

C. Suggestions/Comments by Group

- There is no way to improve on the accuracy of recycling reports currently provided by business' and haulers to the County. (3 people out of 4)
- The Towns should be encouraged to follow the County's example and promote recycling by maintaining mixed paper recycling and procurement of recycled paper. This should be voluntary but encouraged. (3 people out of 4)
- Coordination with the towns is critical as part of the evaluation process when planning locations of DOC sites in the community. Transportation is the major point of concern on the towns' part. There may be other issues that the town needs to focus on in cooperation with the County. (Group strongly agreed that cooperation is needed between the towns and County on this issue.) (4 people out of 4)
- The towns should be encouraged to participate in the planning of recycling within the communities at the same level as the County. The County should provide assistance. (4 people out of 4)
- The group would support an Internet-based waste exchange program. (4 people out of 4)

4. Environmental Protection Presentation and Discussion

A. Clarification Questions Answered Satisfactorily

- What is HHW collection?
- Do the towns currently adopt their own ordinances on dumping?

B. Questions Raised that were Not Satisfactorily Answered

(There were no questions that were not satisfactorily answered)

C. Suggestions/Comments by Group *(Group Size Now “3” instead of “4”)

- Towns should on a voluntary basis adopt County ordinances to address dumping or improper storage of solid waste and enforcement of chapter 1080. (2 people out of 3)
- County will assist towns with enforcement of chapter 1080. (3 people out of 3)
- The towns should “make the ordinance standard to avoid confusion.” (3 people out of 3)
- The Group stressed that they want an amendment to 1080, having the County include the towns when addressing dumping/improper storage and enforcement. (3 people out of 3)

END

Loudoun County Ad Hoc Solid Waste Management Plan Committee
Meeting Summary
January 22, 2003

Present:

County: Sally Kurtz, Chairman
Eleanore Towe
Jim Burton

Town Representatives: Tom Mason, Town of Leesburg
The Honorable Karl Phillips, Council Member, Town of Purcellville
The Honorable Keith Reasoner, Town of Hamilton
The Honorable Elaine Walker, Town of Lovettsville
Charles Hartgrove, Town of Middleburg
Martin Kloeden, Town of Purcellville
Kelly Yost, Town of Round Hill

Absent:

The Honorable Steve Morgart, Town of Hillsboro
The Honorable Kristin Umstattd, Town of Leesburg
Robert Noe, Town of Leesburg

Call to Order

Sally Kurtz, Chairman, called the meeting to order, which was followed by introductions of the Town representatives, staff and members of the public.

Review of the Agenda

Chairman Kurtz asked that the order of the agenda be reversed to move the discussion of Draft Chapter 5 – before the Summary and discussion of comments and recommendations from the January 8, 2003 public input session.

Supervisor Towe moved approval of the November 20, 2002 meeting summary, which was seconded by Tom Mason. Voting on the motion was unanimous.

(See Item #4, 1-22-03 meeting packet)

Item #4, Revised Draft Chapter 5 – Solid Waste Management Plan Document (Committee Findings)

Staff presented the summary of Chapter 5 which represented the Committee's Findings and Outcomes discussed and voted upon from meetings held on September 25, October 9, October 23 and November 20th. Staff asked that the Committee review and affirm the Findings and Outcomes as presented in draft Chapter 5.

Following a brief discussion on Section 5.2, Solid Waste Collection, Supervisor Towe moved that the Committee recommend the adoption of draft Chapter 5 as presented to include the Findings and Outcomes for inclusion in the Solid Waste Management Plan. This motion was seconded by Keith Reasoner, which passed unanimously.

Consideration of Public Input Comments

Following a brief recap of the January 8th public input session, the Committee reviewed the comments which were grouped into nine topic areas which contained the suggestions/comments received from the small group discussions. (*See Item 3 – 1-22-03 meeting packet*)

Topic 1 – New or expanded recycling programs – this section addressed the Committee's proposed expansion in recycling programs or suggestions for further programs.

The comments were reviewed on this section and the Committee agreed to make no change in its findings and outcomes.

Topic 2 – Landfill operations – this section included proposed changes to the operations policy of the County SWMF including the reduction in tipping fees.

The comments were reviewed on this section and the Committee agreed to make no change in its findings and outcomes.

Topic 3 – Outsourcing Collection of County-Generated Solid Waste – responded to the small group discussion of the outsourcing of the public school's collection and transportation of the County's waste. The Committee has recommended maintaining the status quo for collection of solid waste generated in County government buildings including schools.

During the discussion on this topic area, Evan Mohler, Assistant Superintendent of Support Services, discussed the school's waste collection and transportation

process. Following his review of this process, the Committee asked that he prepare a cost analysis and bring this information back to the Committee.

Topic 4 – Town/County Uniformity of Requirements and Cooperation – this topic included comments on issues of cooperation between the Towns and the County with emphasis on consistent regulations and District-wide requirements.

Karl Phillips, Town council member of Purcellville, stated that Chapter 1080 did not include language that would require enforcement and that Purcellville does not have the resources as Leesburg does, for example, to conduct enforcement. He stated that the Town would need a guarantee that the County would assist with enforcement.

Staff responded to this concern indicating that the County would help if they were contacted on enforcement issues.

Other comments included concern with contractual arrangements with haulers and added responsibility of enforcement.

The comments were reviewed on this section and the Committee agreed to make no change in its findings and outcomes.

Topic 5 – Solid Waste Planning Issues – this section of comments included issues of transfer stations, alternative methods of disposal, future landfill sites and surveying of the private sector for feedback on adequacy of disposal infrastructure.

Staff responded to questions on current transfer station facilities in the County.

The comments were reviewed on this section and the Committee agreed to make no change in its findings and outcomes.

Topic 6 – Construction Waste Study – this section included comments on a request to a regional study of construction waste generation and disposal capacity. The Committee was asked whether they would consider an extension on the requested response date for the study.

The Committee inquired as to the response date for the study.

Mr. Weber responded that when they discussed this issue, that a suggested timeframe would be in 2004.

The comments were reviewed on this section and the Committee agreed to make no change in its findings and outcomes.

Topic 7 – Construction Waste Recycling – comments received at the January 8th session addressed various issues related to the recycling of construction waste.

The comments were reviewed on this section and the Committee agreed to make no change in its findings and outcomes.

Topic 8 – Increase effort on public education and outreach – this area of comments addressed various aspects to improve public education and outreach.

Staff briefly reviewed current legislative bills that would mandate some type of electronics recycling program.

The comments were reviewed on this section and the Committee agreed to make no change in its findings and outcomes.

Topic 9 – Recycling Issues – this set of comments addressed various issues regarding recycling.

The comments were reviewed on this section and the Committee agreed to make no change in its findings and outcomes.

Topic 10 – Miscellaneous comments – this set of comments did not fit into any of the identified topical area and were accepted as presented.

Tom Mason asked if the Committee members could obtain a final copy of Chapter 1080 and 1086.

Mr. Weber suggested that a final copy be included as an appendix to the final draft of the Solid Waste Management Plan.

Mr. Burton discussed DEQ regulations on open burning and indicated he would get a copy of the state regulations and template for a proposed local ordinance. He stated that he would like the Board of Supervisors to consider adoption of a local ordinance that would prohibit open burning during the April-September timeframe or whatever DEQ's regulations specify in terms of the time period. He suggested that this be included in the plan and that he would provide the requisite documents to staff.

Mrs. Towe stated that she agreed with Mr. Burton on this issue.

Mayor Walker asked for clarification on the comments from the November 20th meeting and explained her vote on the open burning issue. She also discussed a concern of the Town of Lovettsville having a sufficient water supply in the event of fires that may get out of control if open burning is permitted.

Mr. Weber stated he would incorporate the proposed open burning regulations with the ordinance section. He also asked for clarification that the recommendation would prohibit open burning of all wastes generated offsite and would prohibit burning of waste generated onsite during ozone season to include construction waste and vegetative waste.

Discussion continued on open barrel burning, rural lot burning and the time period this is prohibited (May-September) but need to verify. The Committee requested that staff obtain DEQ regulations concerning this issue and to follow the time period they specify. This information will be brought back to the Committee at its next meeting. *(Note: Prohibitions are actually June, July and August. The current draft of the SWMP addresses this issue per the direction of Mr. Burton in Chapter 5, Findings and Outcomes, Chapter 6, Goals and Objectives, and Chapter 7, Implementation Plan to revise the County's solid waste and fire codes to prohibit such activity.)*

Next Meeting

The next meeting of the Solid Waste Management Plan Committee is scheduled for Wednesday, February 12th at 6 p.m. in the Lovettsville Room.

Adjournment

There being no further business to come before the Committee, the meeting was adjourned.

Loudoun County Ad Hoc Solid Waste Management
Planning Committee Meeting Summary
February 12, 2003

Present:

County: Sally Kurtz, Chairman
Eleanore Towe
Jim Burton

Town Representatives: Tom Mason, Town of Leesburg
The Honorable Keith Reasoner, Town of Hamilton
Charles Hartgrove, Town of Middleburg
Martin Kloeden, Town of Purcellville
Kelly Yost, Town of Round Hill

Absent:

The Honorable Steve Morgart, Town of Hillsboro
The Honorable Kristin Umstattd, Town of Leesburg
The Honorable Elaine Walker, Town of Lovettsville
Robert Noe, Town of Leesburg

Call to Order

Sally Kurtz, Chairman, called the meeting to order, which was followed by introductions of the Committee members, staff and members of the public.

Supervisor Towe moved approval of the meeting summary of January 22, 2003 and Mr. Reasoner seconded the motion, which was approved unanimously.

Resolution of Outstanding Issues

Rick Weber reviewed the outstanding issues that were raised by the Committee members requesting additional information. (*See item #2 of the meeting packet*). These issues included the cost for school staff to collect trash and recyclables from public buildings. This information was provided by Evan Mohler in Attachment 1 of the above noted item. He reported that \$199,201 was the cost for FY 03. It was also reported that the County's General Services' department incurs contractual costs of an additional \$33,874 for FY 03 to cover collection and transport of recyclables from County buildings.

Staff responded to questions related to the amount for the Schools explaining that the \$199,201 is in the Schools' budget and covers the salary and fringe

benefits for three equipment operators and operational, maintenance and depreciation costs.

The second issue discussed in this item was the recommendations to control open burning during periods of poor air quality. Based on the committee's direction, staff reported that revisions to the draft SWMP include the recommendation of prohibiting open burning during the portion of the year when poor air quality is likely to occur. The Committee accepted this revision with a vote of 8-0. (*See Attachment 2 of the item.*)

Staff also reported on the receipt of a written public comment from Jack Freeman concerning the SWMP District's reliance on landfilling in lieu of incineration and resource recovery. (*this comment is provided as Attachment 3 to the item*)

Supervisor Burton provided comments on the issue of incineration and stated that incineration is not economical for the County as Loudoun does not generate enough waste to support this method of disposal.

Final Committee Draft of the Solid Waste Management Plan

Chairman Kurtz suggested that the Committee review the draft plan by chapter and discuss any changes and/or comments. (*See item #3 of the meeting packet.*)

Chapter 1 – Introduction and Overview

The Committee voted unanimously 8-0 to accept this chapter as written.

Chapter 2 – Waste Characterization and Quantities

The Committee voted unanimously 8-0 to accept this chapter as written.

Chapter 3 – The Solid Waste Management System

Supervisor Burton raised the question regarding the amount of municipal solid waste (MSW) generated and the percentage that goes to the transfer station. He asked staff to clarify a chart on page 3-27 in the draft plan showing that 87% of MSW is transferred out of the district. In preparing for the Board meeting, he suggested that this information be revised to include:

- Percentage of waste transferred by haulers;
- Percentage of total MSW waste;
- Percentage of all waste that is taken to the transfer station.

Chairman Kurtz asked the Committee if they would accept the chapter as presented, with the proposed changes. The Committee agreed that this chapter would be accepted with these changes.

Chapter 4 – Consideration of the Solid Waste Hierarchy

The Committee voted unanimously 8-0 to accept this chapter as written.

Chapter 5 – Findings and Outcomes of the Ad Hoc SWMP Committee

The Committee voted unanimously 8-0 to accept this chapter as written.

Chapter 6 – Objectives for the Solid Waste Management Plan

The Committee voted unanimously 8-0 to accept this chapter as written.

Chapter 7 – Implementation of the Solid Waste Management Plan

Rick Weber noted that this chapter was completely rewritten to incorporate all of the Committee's recommendations and continuation of the status quo items. He reviewed the key recommendations of this section. He also noted that the County's solid waste ordinances have been added to this section as discussed at the last meeting.

The Committee voted unanimously 8-0 to accept this chapter as written.

Chapter 8 – Funding the Solid Waste Management System

The Committee voted unanimously 8-0 to accept this chapter as written.

Chapter 9 – Public Participation

The Committee voted unanimously 8-0 to accept this chapter as written.

Supervisor Towe moved that the Ad Hoc Solid Waste Management Plan Committee approve the final Committee Draft of the Solid Waste Management Plan for the Loudoun Solid Waste Management Planning District and forward it to the Loudoun County Board of Supervisors and to the District member Town Councils with a recommendation for approval as amended.

Supervisor Burton seconded the motion which passed unanimously.

Next Steps for the SWMP

Chairman Kurtz reviewed the next steps for completing and approving the Solid Waste Management Plan. (*See item #4 of the meeting packet*) She stated that the plan would be presented to the full Board of Supervisors at their March 17th business meeting and that the committee members will be notified of a time certain for this presentation and are encouraged to attend.

Following the presentation to the Board, the plan is tentatively scheduled for the Board of Supervisors' regular public hearing on Tuesday, April 8, 2003. The Committee members will be notified of the time of the hearing. This hearing will provide an opportunity for further comment on the draft plan.

In response to a question regarding the public hearing, it was noted that the hearing includes the Towns and that the legal advertisement announcing the hearing will include each town. However, each Town will need to submit a resolution from their respective Councils, which will be submitted for the record.

Final action on the plan is anticipated at the Board of Supervisors' regular business meeting on April 21, 2003. Town Councils may consider scheduling review and action on the plan during the month of May with final submission to DEQ by July 2003.

Discussion ensued on the proposed process for finalizing the plan.

Closing Remarks

Members of the Committee and Town representatives commended staff on their work on the draft plan and the process. The members of the Committee also praised Chairman Kurtz for her leadership on this project.

Adjournment

There being no further business to come before the Committee, this meeting was adjourned.

Editors Note: *This meeting summary was not approved by the Ad Hoc Solid Waste Management Planning Committee because it was distributed after the Committee's final meeting.*

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN - 2003

APPENDIX E – CHAPTER 1084

AS ADOPTED BY THE BOARD OF SUPERVISORS ON MAY 20, 2002

CHAPTER 1084

Solid Waste Collection and Transportation

1084.01	Short Title.	1084.09	Performance Standards.
1084.02	Definitions.	1084.10	Notification.
1084.03	Applicability and Exclusions.	1084.11	Vehicles Used for Collection.
1084.04	Administration and Enforcement.	1084.12	Collection and Acceptance of Prohibited Wastes.
1084.05	General Restrictions and Specifically Prohibited Acts.	1084.13	Inspections.
1084.06	Permits.	1084.14	Administrative Actions.
1084.07	Reporting.	1084.15	Appeals.
1084.08	Recycling Services.	1084.16	Equitable Remedies.
		1084.99	Penalty.

CROSS REFERENCES

Regulation of garbage and refuse pickup and disposal services - see Code of Va. ' 15.2-930

Separation of solid waste for recycling - see Code of Va. ' 15.2-937

Preference of recycled paper products in purchasing - see Code of Va. ' 15.2-938

Requirement for recycling reports - see Code of Va. ' 15.2-939

Throwing or depositing injurious or hazardous materials upon highways - see TRAF. 442.01

Beverage container litter control - see GEN. OFF. Ch. 606

Dog waste - see GEN. OFF. 612.19(a)(9)

Noise regulations - see GEN. OFF. 654.02

Solid waste management facilities - see S.U. & P.S. Ch. 1080

Solid waste storage - see S.U. & P.S. Ch. 1082

Solid waste reduction and recycling - see S.U. & P.S. Ch. 1086

Land application of biosolids - see S.U. & P.S. Ch. 1090

1084.01 SHORT TITLE.

This chapter shall be known and may be cited as the "Loudoun County Solid Waste Collection and Transportation Ordinance."

1084.02 DEFINITIONS.

As used in this Chapter, the singular includes the plural, and vice versa and the masculine includes the feminine, and vice versa. Definitions not included in this Section shall assume the meanings included in Part I, 9 VAC 20-80, 9 VAC 20-101, and 9 VAC 20-130.

The following words and terms, when used in this Chapter, shall have the following meanings:

- (1) "Approved facility" means a location that is permitted in accordance with Chapter 1080 of these Codified Ordinances to receive solid waste or recyclable material for storage, disposal, transfer, processing, treatment, recycling, or composting. An approved facility includes, but is not limited to, permitted transfer stations, materials recovery facilities, sanitary landfills, yard waste composting facilities, and vegetative waste management facilities.
- (2) "Board" means the Loudoun County Board of Supervisors.
- (3) "Collection services" means the collection, removal, transportation, or disposal of solid waste for compensation.
- (4) "Collection vehicle" means any vehicle or portion thereof used to collect, remove, transport, or dispose of solid waste or recyclable material and includes any container or other appurtenance attached to, or associated with the vehicle, whether such container or appurtenance is affixed temporarily or permanently.
- (5) "Collector" means any person engaged in collecting, removing, transporting, or disposing of solid waste or recyclable material for compensation from two or more residential, commercial or industrial establishments in the County.
- (6) "Commercial waste" means all solid waste generated by establishments engaged in business operations other than manufacturing or construction.

Commercial waste includes, but is not limited to, solid waste resulting from the operation of stores, markets, office buildings, restaurants, and shopping centers.

- (7) "Compensation" means any type of consideration paid for the collection, transportation, and/or disposal of solid waste, including, but not limited to, direct or indirect compensation.
- (8) "Compliance schedule" means a time schedule for corrective actions to be taken by a person that will ultimately result in such person conforming to the provisions of this Chapter.
- (9) "Construction waste" means solid waste which is produced or generated during the construction, remodeling, or repair of pavements, houses, commercial buildings, and other structures. Construction waste includes, but is not limited to, lumber, wire, sheetrock, broken brick, shingles, glass, pipes, concrete, paving materials, and metal and plastic if they are part of the construction material or empty containers for such materials. Paints, coatings, solvents, asbestos-containing material, any liquid, compressed gases, or semi-liquids and garbage are not construction wastes.
- (10) "Contamination" means the degradation above background of naturally occurring water, air or soil quality, either directly or indirectly, as a result of human activity.
- (11) "County regulatory agency" means any and all of the following County Departments: Solid Waste Management, Public Health, and Building and Development.
- (12) "Customer" means any person that provides compensation to a collector for collection services or recycling services.

- (13) "Debris waste" means solid waste resulting from land clearing operations. Debris waste includes, but is not limited to, stumps, wood, brush, leaves, soil, and road spoils.
- (14) "Demolition waste" means solid waste produced by destruction of structures and their foundations and includes the same materials as construction wastes.
- (15) "Department of Environmental Quality" or "DEQ" means the Virginia Department of Environmental Quality.
- (16) "Director of the Office of Solid Waste Management" or "Director" means the Director of the Office of Solid Waste Management of Loudoun County, or his or her authorized agent, responsible for the administration and enforcement of this Chapter.
- (17) "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, throwing or placing of any solid waste into or on any land or water so that such solid waste or any constituent thereof may enter the environment, be emitted into the air or be discharged into any waters.
- (18) "Garbage" means readily putrescible discarded materials composed of animal, vegetable, or other organic matter.
- (19) "Household" means attached and detached single and multiple residences, including but not limited to, houses, apartment buildings, condominiums, townhouses, mobile homes, bunkhouses, and crew quarters.
- (20) "Household waste" means any waste material, including garbage, trash, and refuse, derived from households.
- (21) "Industrial waste" means any solid waste generated by manufacturing or industrial process that is not a regulated hazardous waste. Industrial waste may include, but is not limited to, waste resulting from the following manufacturing

processes: electrical power generation; fertilizer/agricultural chemicals; food and related products/byproducts; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment.

This term does not include mining waste or oil and gas waste.

- (22) "Inert waste" means solid waste which is physically, chemically and biologically stable from further degradation and considered to be nonreactive. Inert waste includes rubble, concrete, broken bricks, bricks and blocks. The term "inert waste" does not mean construction waste or demolition waste.
- (23) "Institutional waste" means all solid waste emanating from institutions such as, but not limited to, hospitals, nursing homes, orphanages, and public or private schools.
- (24) "Landfill" means a solid waste facility which uses burial as the primary means of disposal and includes sanitary landfills, industrial waste landfills, or construction/demolition/debris landfills.
- (25) "Landscape maintenance" means the care of lawns, shrubbery and vines, and includes the pruning of trees.
- (26) "Litter" means any solid waste that is discarded or scattered about outside of a lawful container or collection vehicle.
- (27) "Major collector" means a collector that operates four or more collection vehicles and/or collects more than 2,000 tons of solid waste per year. "Minor collectors" under contract or subcontract to a "major collector" shall be considered a

“major collector” in accordance with this Chapter and Chapter 1086 of these Codified Ordinances.

- (28) "Materials recovery facility" or "MRF" means a solid waste facility which collects mixed solid wastes and manually or mechanically separates recyclable materials to be marketed and disposes of all non-recyclable wastes to a permitted facility, or a solid waste management facility for the collection, recovery and processing of materials, such as metals, paper, or glass, from solid waste for the production of a fuel from solid waste.
- (29) "Minor collector" means a collector that operates three or fewer collection vehicles and collects 2,000 tons or less of solid waste per year. A minor collector shall not mean a collector that is a subsidiary of a major collector or has a parent company or owner that is a major collector or is a major collector doing business under another name. “Minor collectors” under contract or subcontract to a “major collector” shall be considered a “major collector” in accordance with this Chapter and Chapter 1086 of these Codified Ordinances.
- (30) "Mulch" means woody waste consisting of stumps, trees, limbs, branches, bark, leaves, and other clean wood waste which has undergone size reduction by grinding, shredding, or chipping.
- (31) "Municipal solid waste" means that waste which is normally composed of residential, commercial, and institutional solid waste.
- (32) "Nuisance" means an activity which unreasonably interferes with an individual's or the public's comfort, convenience or enjoyment such that it interferes with the rights of others by causing damage, annoyance or inconvenience, and as defined in Section 648.03(g) of these Codified Ordinances.

- (33) "Office of Solid Waste Management" or "OSWM" means the Office of Solid Waste Management of Loudoun County.
- (34) "Permit" means the official document signed by the Director which allows the operation of a collection vehicle(s) in Loudoun County for purposes of providing collection services or recycling services.
- (35) "Person" means and includes an individual, business, corporation, association, firm, partnership, joint stock company, county, city, town, governmental body, or any other legal entity.
- (36) "Pollute" means the release of any substance which causes or contributes to, or may cause or contribute to, environmental degradation when discharged into the environment.
- (37) "Principal recyclable materials" means paper, metal (except automobile bodies), plastic, glass, yard waste, wood, and textiles. Principal recyclable materials do not include large diameter tree stumps (tree stumps larger than six inches in diameter).
- (38) "Prohibited waste" means any waste that is radioactive, hazardous, infectious, pathological, or classified as a special waste by the Code of Virginia.
- (39) "Putrescible waste" means solid waste which contains organic material capable of being decomposed by micro-organisms and causes odors.
- (40) "Reclaimed material" means a material which is processed or reprocessed to recover a usable product or is regenerated to a usable form.
- (41) "Recyclable material" means any material separated from the waste stream for utilization as a raw material in the manufacture of a new product. The term "recyclable material" includes both source separated material and mechanically separated material.

- (42) "Recycled material" means a material that is derived from recycling.
- (43) "Recycling" means the process of separating a given waste material from the waste stream and processing it so that it may be used again as a raw material for a product, which may or may not be similar to the original product. For the purposes of this Chapter, recycling does not include processes that only involve size reduction.
- (44) "Recycling drop-off center" means a lawful collection site for the acceptance by donation, redemption, or purchase of recyclable material from the public. Such a facility does not use power-driven processing equipment.
- (45) "Recycling facility" means a facility which collects, processes, repackages, and markets previously separated recyclable material. The term "recycling facility" does not include solid waste transfer stations, materials recovery facilities, sanitary landfills, yard waste composting facilities, or vegetative waste management facilities.
- (46) "Recycling services" means the collection of source-separated recyclable material and ensuring the delivery of the recyclable material to a recycling facility or other lawful facility for its ultimate disposition as a recycled material.
- (47) "Refuse" means all solid waste products having the character of solids rather than liquids and which are composed wholly or partially of materials such as garbage, trash, rubbish, litter, residues from clean up of spills or contamination, or other discarded materials.
- (48) "Residential waste" means any waste material, including garbage, trash, and refuse, derived from households. Households include single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas.

- (49) "Resource recovery" means the recovery of material or energy from solid waste.
- (50) "Rubbish" means combustible or slowly putrescible discarded materials which include, but are not limited to trees, wood, leaves, trimmings from shrubs or trees, printed matter, plastic and paper products, grass, rags, and other combustible or slowly putrescible materials not included under the term garbage.
- (51) "Sanitary landfill" means an engineered land burial facility for the disposal of solid waste which is so located, designed, constructed and operated as to contain and isolate the solid waste so that it does not pose a substantial present or potential hazard to human health or the environment.
- (52) "Scrap metal" means bits and pieces of metal parts such as bars, rods, wire, or metal pieces that may be combined together with bolts or soldering which are discarded materials and can be recycled.
- (53) "Site" means all land and structures, other appurtenances and improvements thereon used for treating, storing, and disposing of solid waste. "Site" includes adjacent land within the facility boundary used for the utility systems, such as repair, storage, shipping, or processing areas, or other areas incident to the management of solid waste. Further, "site" includes all sites, whether they are planned and managed facilities or open dumps.
- (54) "Solid waste" means any garbage, refuse, sludge, or other discarded material, including solid, liquid, semisolid, or contained gaseous material, resulting from household disposal, commercial and industrial operations, agricultural operations, or community activities. "Solid waste" does not include solid or dissolved materials in domestic sewage, solid or dissolved materials in irrigation return flows, industrial discharges or special nuclear or by-product materials.

- (55) "Solid waste management facility" or "SWMF" means a site used for the planned treating, recycling, storing and disposing of solid waste. A facility may consist of several treatment, storage or disposal units. Further, "solid waste management facility" or "SWMF" means a facility so located, designed and operated that it does not impose a present or potential hazard to human health or the environment, including the pollution of air, land, surface water or ground water.
- (56) "Source-separated" means materials separated from the waste stream, by the waste generator, specifically for use, reuse, or recycling.
- (57) "Transfer station" means any intermediate solid waste storage or collection facility at which solid waste is transferred from collection vehicles to haulage vehicles for transportation to a central solid waste management facility for disposal, incineration, or resource recovery.
- (58) "Unpermitted collector" means a collector as defined herein operating in Loudoun County without a permit issued by the Director.
- (59) "Vegetative waste" means decomposable materials generated by yard and lawn care or land clearing activities and includes, but is not limited to, leaves, grass trimmings, woody wastes such as shrub and tree prunings, bark, limbs, roots, stumps, and mulch.
- (60) "Vegetative waste management facility" means a solid waste facility that collects, processes, and manages vegetative waste.
- (61) "Yard waste" means decomposable waste materials generated by yard and lawn care and includes leaves, grass trimmings, brush, wood chips, and shrub and tree trimmings. Yard waste shall not include roots or stumps that exceed six inches in diameter. (Note: Yard waste is also vegetative waste; however, the

terms are not interchangeable because vegetative waste may include waste that is not yard waste.)

- (62) "Yard waste composting facility" means an engineered facility for composting of yard waste which is so located, designed, constructed and operated to isolate, process and manage the yard waste and yard waste compost so that it does not pose a present or potential hazard to human health or the environment.

1084.03 APPLICABILITY AND EXCLUSIONS.

(a) Applicability. This Chapter shall apply to any person that collects, removes, transports, or disposes of solid waste or recyclable material in Loudoun County. Except where expressly excluded in this Chapter, solid waste shall include, but not be limited to, municipal solid waste, construction waste, demolition waste, debris waste, vegetative waste, yard waste, and inert waste. This Chapter shall not apply to the collection, removal, transportation, or disposal of any materials other than solid waste or recyclable material.

(b) Exclusions. This Chapter shall not apply to the following uses or activities:

- (1) Any individual residing in Loudoun County who collects, processes, transports, or disposes solely of his or her own solid waste or recyclable material that was generated by his or her household, whether or not that person receives compensation, provided that such transportation does not result in the loss of any material being transported or such disposal does not occur in an unlawful manner or at an unlawful site;

- (2) The collection, removal, transportation, or disposal of solid waste or recyclable material performed solely in any incorporated town within the boundaries of Loudoun County unless and until the governing body of any such town, by appropriate action, indicates its intention to have the collection, removal, transportation, or disposal of solid waste or recyclable material covered by the provisions of this Chapter. Upon the taking of such action by the governing body of any such incorporated town, the provisions of this Chapter shall apply fully to any collection, removal, transportation, or disposal of solid waste or recyclable material in such incorporated town.

1084.04 ADMINISTRATION AND ENFORCEMENT.

(a) Administrative Authority. The Director of Solid Waste Management, or his or her agent, shall be responsible for the administration of this Chapter and shall have the authority to enforce compliance through the use of administrative actions and civil and criminal penalties as authorized by this Chapter.

(b) Right of Entry. The Director, or his or her agent, may, with proper identification, enter, at reasonable times, upon public or private property for the purposes of inspecting and investigating conditions relating to the enforcement of this Chapter, but only after obtaining consent of the owner or occupant of the private property to be inspected, which owner or occupant has the authority, under law, to authorize such entry and inspection.

(c) Inspection Warrant.

- (1) If such consent is not obtained for any reason or a justifiable reason exists for not seeking consent, including the inability to contact or locate the person with the authority to authorize such inspection, the Director shall obtain, from a County magistrate or judge, a warrant authorizing such entry, inspection or investigation upon such private property upon a showing of probable cause, supported by an affidavit, particularly describing the place, thing, or person to be inspected or investigated, and the purpose for which the inspection or investigation is to be made. Probable cause shall be deemed to exist either if reasonable administrative standards for conducting such inspection or investigation are satisfied, with respect to the particular place, thing or person, or if there exists probable cause to believe that there is a condition, object, activity, or circumstance which legally justifies such inspection or investigation. The supporting affidavit shall contain either a statement that consent to inspect or investigate has been sought and refused or not received or a description of the circumstances reasonably justifying the failure to seek such consent in order to effectively enforce this Chapter.
- (2) An inspection warrant shall be effective for the time specified therein, not to exceed ten days, unless extended or renewed by the judicial officer who signed and issued the original warrant, upon a showing that such extension or renewal is in the public interest. Such warrant shall be executed and returned to the judicial officer by whom it was issued within the time specified in the warrant or within the extended or renewed time. After the expiration of such time, the warrant, unless executed, shall be void. An inspection pursuant to such warrant may not be made in the absence of

the owner, custodian or possessor of the particular place, thing, or person unless specifically authorized by the judicial officer upon a showing that such authority is reasonably necessary to effectuate the purpose of this Chapter. An inspection pursuant to this warrant shall not be made by means of forcible entry, except that the judicial officer may expressly authorize a forcible entry where facts are shown sufficient to create a reasonable suspicion of a violation of any of the provisions of this Chapter which, if such violation existed, would be an immediate threat to health or safety, or where facts are shown establishing that reasonable attempts to serve a previous warrant have been unsuccessful. In the case of inspection of a dwelling, prior consent must be sought and refused, unless the issuing judicial officer finds that failure to seek consent is justified and that there is a reasonable suspicion of an immediate threat to public health or safety.

(d) Compliance With Inspection Warrants. No person shall willfully refuse to permit an inspection lawfully authorized by a warrant issued pursuant to this Chapter.

1084.05 GENERAL RESTRICTIONS AND SPECIFICALLY PROHIBITED ACTS.

(a) General Restrictions. No person shall engage in the collection, removal, transportation, or disposal of solid waste or recyclable material in such a manner as to create a public nuisance (for example, littering or excessive noise), pollute the air, cause a discharge of pollutants to the waters of Loudoun County or otherwise impair the quality of the environment or create a hazard to the public safety, health, or well-being.

(b) Specifically Prohibited Acts. No person shall engage in any act specifically prohibited in this Chapter to include, but not limited to the following:

- (1) No person shall dispose of solid waste in Loudoun County except at an approved facility that has been specifically permitted by the Director to accept such waste.
- (2) No collector, except those specifically excluded under this Chapter, shall collect, remove, transport, or dispose of solid waste in Loudoun County without a valid permit issued by the Director.
- (3) No collection vehicle shall be operated in Loudoun County for the purposes of performing collection services or recycling services without a valid permit issued under this Chapter.
- (4) No collection vehicle shall be operated in Loudoun County for the purposes of performing collection services or recycling services without the proper vehicle permits, insurance, license, and inspections as required by County, State, or Federal regulations.
- (5) No collection vehicle shall be operated in such a manner as to allow solid waste or recyclable material to blow, spill, leak, fall, or be thrown onto or into any street, alley, sewer inlet, water body, public or private property, or any other area of the County that is not an approved facility or recycling facility.
- (6) No permitted collector, unless specifically exempted under this Chapter, shall fail to provide recycling services to any customer as required under this Chapter.

- (7) No permitted collector shall dispose of any source-separated recyclable material except at a recycling facility or approved facility for ultimate disposition as a recycled material.
- (8) No permitted collector shall mix any source-separated recyclable material with solid waste.
- (9) No permitted collector shall discontinue collection services or recycling services without written notification to the customer and the Director in accordance with this Chapter.

(c) Penalty. The commission of a specifically prohibited act shall subject the person to administrative and/or judicial remedies and penalties as authorized in this Chapter.

1084.06 PERMITS.

(a) Required. An annual permit, as provided for in this Chapter, is required for any collector as defined in Section 1084.02. No person shall engage in business within the County as a collector and transporter of solid waste or recyclable material, or conduct any portion of the operation of such business within this County, without a valid permit issued in accordance with this Chapter. For previously permitted collectors, a new permit must be obtained prior to March 31 of each year, and any permit issued shall be valid from March 31 of the current year to March 31 of the following year. For a person that does not already have a permit, a new permit may be obtained at any time, but such permit may not be issued for a period of more than one year and shall be valid from the date of issuance to March 31 following the date of issuance.

(b) Exemptions. The permitting requirements contained in this Chapter shall be deemed not applicable to the following uses and activities. Such uses and activities, however, shall be subject to the provisions set forth in Section 1084.05.

- (1) No permit shall be required for any person, collector, or collection vehicle that solely collects and transports solid waste that is generated outside Loudoun County.
- (2) No permit shall be required for any person or collector that solely collects solid waste or recyclable material from an approved facility or recycling facility for purposes of transporting such solid waste or recyclable material to a location outside Loudoun County.
- (3) No permit shall be required for any collector or collection vehicle that solely collects and transports debris waste and vegetative waste, provided that such waste is not mixed with other types of solid waste. This exemption shall not apply to source-separated yard waste or that part of the vegetative waste stream that is source-separated and intended for ultimate disposition as a recycled material.
- (4) No permit shall be required for any collector or collection vehicle that solely collects and transports inert waste, provided that the inert waste is not mixed with other types of solid waste. This exemption shall not apply to inert waste that is construction waste or demolition waste.

(c) Application. Every person desiring a permit under this Chapter shall submit a written application to the Director in the format specified by the Director. An application for a permit shall not constitute authorization to provide collection services pending action on the request. A previously permitted collector shall submit an application for a permit

between January 15 and February 15 of the calendar year that the existing permit expires.

Any person that does not already have a permit may apply for one at any time. The applicant shall provide sufficient information and documents to ensure that such applicant is capable of lawfully providing collection services and recycling services in accordance with this Chapter. At a minimum, an application for a permit shall include:

- (1) Business name, business address, mailing address, and telephone number;
- (2) Type of business (sole proprietor, partnership, corporation, etc.);
- (3) Name of business owner(s) or principal official;
- (4) Name of parent company (if applicable);
- (5) Location (street address and city) of collection vehicle parking and collection container storage (if applicable);
- (6) Geographic areas within the County that the applicant serves;
- (7) The number of residential and nonresidential customers served;
- (8) The frequency of collection (regular collection schedule);
- (9) The weather conditions and holidays for which service shall be suspended and the collection schedule thereafter;
- (10) The number and types of collection vehicles to be used;
- (11) Certification of vehicle insurance, inspections, and licensure;
- (12) Statement of collection services to be provided to all customers;
- (13) Statement of recycling services to be provided to all customers, as applicable;
- (14) Any other additional reasonable information deemed necessary by the Director for the administration of this Chapter.

(d) Fees. An application for a permit shall be accompanied by a fee of ten dollars (\$10) per collection vehicle for any minor collector and thirty dollars (\$30.00) per collection vehicle for any major collector. The fee shall be paid for each collection vehicle to be used by the applicant in providing collection services or recycling services in Loudoun County. The annual license fee shall not be prorated. The applicant shall pay all required fees prior to issuance of a permit. Failure to submit any required fees shall result in an incomplete application and denial of a permit by the Director. The fee shall be waived for any County- or Town-owned and/or operated collection vehicle.

(e) Action on Application. Within thirty (30) days of receipt of a permit application as set forth in Subsection 1084.06(c), a permit shall be issued or denied by the Director. The Director shall issue a permit upon a satisfactory finding that the applicant has complied with the provisions of this Chapter. The permit issued shall indicate an assigned registration number for each collection vehicle covered by such permit. If a permit application is denied, the reasons for denial of the permit application shall be stated, in writing, to the applicant. Upon receipt of an amended application, the Director shall issue a permit upon finding that the applicant has addressed the reasons for the initial denial and demonstrated compliance with the provisions of this Chapter. If an applicant does not submit an amended application within ninety (90) days of the date of denial, the application shall expire at the close of the next business day.

(f) Numbering of Vehicles. As a part of permit issuance, the Director shall assign and provide to all collection vehicles covered by the permit a registration number that shall be permanently affixed by the applicant to a location specified by the Director. In the event that a collection vehicle covered under a permit is discontinued from service or sold, the

registration number for that collection vehicle shall be returned to the Director within fourteen (14) days from the date of sale or discontinuance from service. It shall be unlawful for a collector to transfer a registration number to another person, collector, or collection vehicle without prior written approval from the Director.

(g) Expiration. All permits issued under this Chapter are valid for a period of not more than one year and, regardless of the date of permit issuance, shall expire on March 31 following the date of issuance.

(h) Amendment. A valid permit in good standing may be amended by the Director to include the addition or deletion of any collection vehicle(s) provided that such addition or deletion does not change the status of the collector from a minor collector to a major collector or vice versa. Any request by a permitted collector for such an amendment must be made in writing to the Director and submitted along with the vehicle information and documentation required under Subsection 1084.06(c) and the applicable fee as provided for in Subsection 1084.06(d). The Director shall approve or deny any such request for a permit amendment within fourteen (14) days of receipt of the request. An application for a permit amendment shall not constitute authorization to provide collection services or recycling services using a collection vehicle that has not been issued a registration number pending action on the request.

(i) Compliance. Solid waste collection services and recycling services shall be performed in strict conformity with the permit and all other applicable County, State, and Federal regulations. Collection services or recycling services shall not occur prior to receipt of a permit issued by the Director or continue after expiration of a permit.

1084.07 REPORTING.

(a) Required. Each permitted collector shall submit quarterly collection reports to the Director on a form provided by the Director. Collection reports shall be submitted on a quarterly basis for the periods from October through December; January through March; April through June; and July through September, by no later than January 31; April 30; July 31; and October 31, for the preceding quarter. Submission of the quarterly collection report shall be part of the requirement for maintaining a permit in good standing. Failure to submit any quarterly collection report in accordance with this Section shall be considered a violation of permit requirements and shall result in enforcement actions and penalties as authorized by this Chapter.

(b) Collection Report Information. The quarterly collection report shall include information pertaining to the solid waste and recyclable material collected in Loudoun County by the permitted collector for the specified period of time. A report shall be certified and signed by a responsible company official. All measurements included in any report shall be based on the weight of each type of solid waste or recyclable material reported, provided that where such measurements cannot be accurately determined, the measurement shall be based on carefully estimated data. Where estimates are submitted, such estimates shall contain sufficient detail to reasonably describe how the estimate was prepared. The report shall contain, at a minimum, the following information:

- (1) Name and address of the reporting collector;
- (2) Period of time covered by the report;
- (3) Number of customers provided solid waste collection services;

- (4) Type of solid waste collected (municipal solid waste, arboreal/debris waste, construction/demolition waste);
- (5) Source of solid waste collected (household, commercial, institutional);
- (6) Amount (weight in tons) of solid waste collected;
- (7) Amount (weight in tons) of solid waste disposed;
- (8) Number of customers provided recycling services;
- (9) Type of recyclable material collected (commingled, glass, plastic, aluminum, newspaper, cardboard, paper, metal, yard waste);
- (10) Source of recyclable material collected (household, commercial, institutional);
- (11) Amount (weight in tons) of recyclable material collected;
- (12) Amount (weight in tons) of recyclable material recycled or diverted and location of recycling facility or diversion location;
- (13) Amount (weight in tons) of recyclable material disposed and location of disposal.

(c) Documentation. Supporting documentation used in the preparation of any quarterly collection report shall be retained for purposes of audit, inspection, and/or clarification of reported data by the Director for a period of four (4) years following submissions of such report. Such documentation shall include, but not be limited to, weight or volume receipts received from solid waste management facilities and weight or volume receipts received from the marketing of collected materials at recycling or redemption centers. Such documentation shall be utilized by the Director to facilitate compliance with the requirements of Section 10.1-1411 of the Code of Virginia.

1084.08 RECYCLING SERVICES.

(a) General Requirements. Each permitted collector, unless specifically exempted under this Section, shall provide recycling services to all residential and nonresidential customers in accordance with this Chapter and Chapter 1086 of these Ordinances. Each permitted collector shall provide curbside recycling services to each residence or business to which such collector provides curbside solid waste collection services. In addition, the permitted collector shall provide bulk container recycling services to each multifamily dwelling, apartment complex, and business to which such collector provides bulk container solid waste collection services. A permitted collector shall collect the source-separated recyclable material and transport such material to an approved facility or recycling facility for ultimate disposition as a recycled material. No collector shall be required to collect from any customer any recyclable material that does not meet the set-out requirements as provided in Chapter 1086 of these Codified Ordinances, provided that such customer has been properly notified of the set-out requirements in accordance with this Chapter. This Chapter shall not impose any liability upon any collector for failure of a customer to participate in recycling as long as such collector provides the recycling services in accordance with this Chapter and Chapter 1086 of these Codified Ordinances.

(b) Exemptions. Any minor collector may elect to be exempt from the provisions of Section 1084.08. Should a minor collector provide recycling services, such collector may choose to limit the required services under Subsections 1084.08(c) and (d). In addition, such collector shall not be subject to the reporting provisions required under Subsections 1084.07(b)(11) through (13).

(c) Required Services for Residential. Each permitted collector shall collect from all residential customers (single family and multifamily dwellings or facilities and apartment complexes) the following source-separated recyclable material, at a minimum:

(1) As of January 1, 2003:

- A. Newspaper and magazines;
- B. Container glass, metal and aluminum cans, and plastic beverage and detergent containers.

(2) As of July 1, 2003:

- A. Newspaper and magazines;
- B. Container glass, metal and aluminum cans, and plastic beverage and detergent containers;
- C. Cardboard and paperboard;
- D. Yard waste.

(d) Required Services for Nonresidential. As of October 1, 2003, each permitted collector shall collect from all nonresidential customers (business, commercial, industrial, and institutional) at least one principal recyclable material (PRM) that the customer generates annually in the greatest quantity provided that those materials are white office paper, mixed paper, or corrugated cardboard. Should the nonresidential customer generate a PRM that is not one of these three materials, the customer/generator is responsible for arranging for collection, transport, and recycling of the PRM. In multi-tenant commercial properties in which individual businesses do not manage their own solid waste, the type of recyclable container provided by the collector shall be determined on the basis of the property's combined waste stream. For nonresidential customers, the minimum recycling storage capacity shall be twenty-five (25) percent of the solid waste storage

capacity, and the maximum recycling storage capacity shall be one-hundred (100) percent of the solid waste storage capacity.

(e) Permit. No permit shall be issued to a major collector or continued in effect until and unless such collector maintains recycling services for all customers as specified in this Chapter.

(f) Liability. This Section shall not affect the right of any person to sell or otherwise dispose of waste material as provided in Virginia Code, Section 15.2-933 or permitted under any other law of the Commonwealth of Virginia, nor shall it impose any liability upon any collector for failure of its customers to comply with this Section.

1084.09 PERFORMANCE STANDARDS.

(a) General Requirements. Each collector shall provide solid waste collection services and recycling services in such a manner so as to not create a nuisance or adversely affect public health, or violate any ordinance or code of Loudoun County or the Code of Virginia. Each collector shall collect all solid waste and recyclable material from a customer in accordance with the requirements of this Chapter, the permit, and the approved written statements of service provided to the customer pursuant to Subsections 1084.06(c)(12) and (13) and 1084.10(c).

(b) Maintenance of Telephone. Each permitted collector must maintain a valid business mailing address and operable telephone number. A permitted collector shall provide written notification of any change of business address or telephone number to the Director within twenty-four (24) hours of the change.

(c) Frequency of Service. All putrescible solid waste shall be collected and transported from the premises to which solid waste collection services are provided at least once per week. All other solid waste shall be collected with sufficient frequency as to prevent the blowing or spillage of solid waste from any storage container. All recyclable material shall be collected and transported from the premises to which recycling services are provided at least once every two weeks. In the event of mishap, or breakdown of regular equipment, or if collection services or recycling services to any customer is missed for any reason other than inclement weather or holidays, the collector shall provide alternate services within twenty-four (24) hours, except that alternate services for collection missed on Saturday shall be provided within forty-eight (48) hours. In the event of missed collection services or recycling services due to inclement weather or holidays, the collector shall provide alternate services to all affected customers in accordance with the permit and the written statement of collection and recycling services specified in Subsection 1084.10(c).

(d) Solid Waste Disposal. No vehicle or container used by any person for collecting, transporting, or disposing of solid waste or recyclable material shall be emptied in the County on any ground or location other than at an approved facility or recycling facility. All solid waste or recyclable material collected by a collector shall become the property of that collector, who shall be responsible for its disposal at an approved facility or recycling facility.

(e) Leaking and Spillage. Collection services and recycling services shall be performed in a manner such that solid waste or recyclable material does not blow, leak, spill, fall, or is thrown onto or into any street, alley, sewer inlet, water body, private or public

property, or any other area that is not a lawful disposal site. A collection vehicle and its contents shall not produce foul odors when parked nor leak any fluids while parked or moving. Solid waste and recyclable material must be completely contained or otherwise covered during transport so as to prevent any waste or material from blowing, leaking, spilling, falling, or being thrown. If any solid waste or recyclable material blows, leaks, spills, falls, or is thrown onto or into any street, alley, sewer inlet, water body, private or public property, or any other area that is not a lawful disposal site during the performance of collection services or recycling services, it shall be the responsibility of the collector to immediately correct such conditions. Any such condition that cannot be immediately corrected, shall be reported to the Director in person or by telephone within four (4) hours of the incident with an explanation of the condition and the time frame in which the condition shall be corrected by the collector and said information shall also be sent in writing to the Director within twenty-four (24) hours of the incident.

(f) Collection Containers. All containers used for the collection and/or transportation of solid waste and recyclable material shall be kept and maintained in a clean and sanitary condition and shall be constructed, maintained, and operated so as to prevent blowing, spilling, or leaking of solid waste or recyclable material. All collection containers with a capacity of two (2) cubic yards or greater that are used for the collection of solid waste or recyclable material shall be clearly marked as to their capacity in cubic yards, the type of materials acceptable for the container, and the container owner's name and telephone number. Solid waste and recyclable material storage containers shall be adequately covered or secured in a manner sufficient to prevent leakage or spillage of the solid waste or recyclable material contained therein. A collector shall not store collection containers on any private property or public right of way unless the property owner has consented in

writing and the Zoning Administrator of Loudoun County has issued a written determination that the site is a lawful place to store collection containers.

1084.10 NOTIFICATION.

(a) General Requirements. Each permitted collector that provides collection services or recycling services shall comply with the notification requirements set forth in this Section.

(b) Exemptions. Any minor collector is exempt from the provisions set forth in Subsections 1084.10(c) and 1084.10(d).

(c) Services Provided. Prior to commencement of collection services and no less frequently than annually thereafter, each permitted collector shall furnish to the Director, all existing customers, and all new customers a written statement of collection services and recycling services. The statement of services shall, at a minimum, include the following information:

- (1) Business name, mailing address, and telephone number;
- (2) Any company rules concerning collection, which must be consistent with the provisions of this Chapter;
- (3) Frequency of collection;
- (4) The weather conditions and holidays for which service shall be suspended and the collection schedule thereafter;
- (5) Rules concerning containerization of solid waste, which must be consistent with the provisions of this Chapter and Chapter 1082 of these Codified Ordinances;

- (6) Rules concerning containerization of recyclable material, which must be consistent with the provisions of this Chapter and Chapters 1082 and 1086 of these Codified Ordinances. This provision shall not apply to minor collectors.

(d) Set-out Requirements. Solid waste intended for disposal shall be set out separately from recyclable material. The collector shall furnish to the Director, all existing customers, and all new customers a statement of set-out requirements for solid waste consistent with this Chapter and Chapter 1082 of these Codified Ordinances. Major collectors must also provide to the Director, all existing customers, and all new customers a statement of set-out requirements for recyclable material consistent with this Chapter and Chapters 1082 and 1086 of these Codified Ordinances. The collector shall include in the statement of set-out requirements that such collector is not required to collect from any customer any recyclable material that does not meet the set-out requirements.

(e) Termination of Service. Any collector who intends to terminate collection services or recycling services to any customer as the result of a sale, transfer, or cessation of business shall provide written notification to the Director and each affected customer of the intended termination of service at least thirty (30) days prior to the date of intended termination of collection services. Any collector who intends to terminate collection services or recycling services to any customer as a result of nonpayment for services shall provide written notification to the affected customer of the intended termination of service at least (14) days prior to the date of intended termination.

1084.11 VEHICLES USED FOR COLLECTION.

(a) General Requirements. Any vehicle used to provide collection services or recycling services in Loudoun County shall be in conformance with this Chapter and operated in such a manner as to not create a nuisance or adversely affect public health. Any collector operating a collection vehicle in violation of this Chapter shall be subject to enforcement actions and penalties as authorized in this Chapter.

(b) Identification. Any collection vehicle used to provide collection services or recycling services, which is not specifically excluded or exempted under this Chapter, shall be operated only under a valid permit and shall have a registration number assigned to such vehicle by the Director. The business name and operable telephone number of the collector shall be visibly displayed on both sides of any permitted vehicle in letters and numbers not less than four inches high. No variances from these display provisions shall be allowed except by written permission of the Director.

(c) Design and Maintenance. Collection vehicles used for the collection and transportation of solid waste or recyclable material shall have protection against the leaking or spilling of solid waste or recyclable material and against solid waste or recyclable material being blown or hurled from such vehicles.

(d) Parking and Storage. Collection vehicles shall be stored in a neat and sanitary manner and shall not provide areas for insect breeding, vectors, or be a nuisance to adjoining property owners or a source of odors. Collection vehicles shall not be parked, except for temporary stops during the performance of collection services, on any public right-of-way, and shall be parked, except for temporary stops during the performance of

collection services, in properly zoned locations. Parking of collection vehicles on the public right-of-way, other than temporary stops during the performance of collection services, shall be considered a public nuisance and is prohibited. A collector shall not park or store collection vehicles on any private property unless the property owner has consented in writing and the Zoning Administrator of Loudoun County has issued a written determination that the site is a lawful place to park or store a collection vehicle.

1084.12 COLLECTION AND ACCEPTANCE OF PROHIBITED WASTES.

No prohibited waste shall be knowingly collected or removed by a collector or any other person, unless such collector or person is specifically licensed or permitted to collect such waste and provide that the waste is disposed of at a lawful facility specifically licensed to accept such waste. This Section shall not be construed to apply to materials loaded and carried by public officials in emergency situations.

1084.13 INSPECTIONS.

All County regulatory departments shall be allowed access to any collection vehicle at any reasonable time to inspect, investigate, evaluate, conduct tests, or take samples for testing as is deemed reasonably necessary to ensure compliance with the provisions of a permit and applicable County regulations.

1084.14 ADMINISTRATIVE ACTIONS.

(a) Notices of Violation. If the Director determines that a person has failed to comply with any of the provisions of this Chapter, the Director shall immediately serve or have served upon the person, by hand delivery or by registered or certified mail, to the address indicated in County records a notice of violation. Such notice shall set forth specifically the corrective action needed to be taken by such person to come into compliance with this Chapter and shall specify the time frame within which such corrective action shall be completed. If the person fails to comply within the time specified, such person shall be subject to any enforcement action and penalties as authorized in this Chapter.

(b) Compliance Orders. Whenever the Director determines that any permit holder is not in compliance with the permit, or that the permit holder is in violation of this Chapter or any applicable County regulation, the Director may issue an order requiring immediate compliance or compliance within a specified time period.

(c) Suspension or Revocation of Permits. The Director may suspend or revoke a permit or deny issuance of a new permit in order to enforce the provisions of this Chapter or protect the public health or environment. Once the Director has issued a suspension or revocation, the permittee will immediately stop operation and take appropriate corrective actions and shall not reinitiate collection or recycling services until the Director reinstates the permit in writing. The permit shall be reinstated upon completion of corrective actions as outlined by the Director.

1084.15 APPEALS.

An applicant or a permittee may appeal the denial of a permit, a suspension or revocation, a notice of violation, a compliance order, or a required corrective action to the Director. Appeals must be made in writing with supporting justification for the appeal within thirty (30) days after the decision (which is the subject of the appeal) has been rendered by the Director. Within thirty (30) days of the receipt of the appeal, the Director will notify the appellant, in writing by registered or certified mail, return receipt requested, as to the Director's final determination. If the appellant disagrees with the Director's final determination, that person or business may appeal, in writing, within thirty (30) days of receipt of the final determination, directly to the County Administrator. The County Administrator, or his or her designee, shall render a decision as to the appeal and notify both the appellant and the Director, in writing, within thirty (30) days of receipt of the request for appeal. All administrative appeals must be made in writing and shall include justification for the appeal and any supporting documents. Failure to appeal within the period specified herein will constitute a waiver of any administrative or judicial remedies.

1084.16 EQUITABLE REMEDIES.

In addition to the penalty provided in Section 1084.99, the Director may initiate injunction, mandamus, abatement or any other appropriate action to prevent, enjoin, abate or remove a violation of any of the provisions of this Chapter.

1084.99 PENALTY.

(a) In addition to the penalties provided in Section 202.99 and this Section, a violation of any of the provisions of this Chapter shall be:

- (1) Cause for the denial, suspension, restriction, or revocation of any and all permits issued under this Chapter;

(2) Subject to a civil penalty not to exceed five hundred dollars (\$500.00) for each offense. Each day any violation occurs or continues shall constitute a separate offense.

(b) Whoever fails to comply with a valid warrant obtained pursuant to Section 1084.04 is guilty of a Class 3 misdemeanor and shall be fined not more than five hundred dollars (\$500.00).

**LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN - 2003
APPENDIX F – CHAPTER 1086**

AS ADOPTED BY THE BOARD OF SUPERVISORS ON MAY 20, 2002

CHAPTER 1086
Solid Waste Reduction and Recycling

1086.01	Short Title.	1086.08	Notification.
1086.02	Definitions.	1086.09	Set-out Requirements.
1086.03	Applicability and Exclusions.	1086.10	Reporting.
1086.04	Purpose.	1086.11	Recycling Drop-off Centers.
1086.05	Administration and Enforcement.	1086.12	Scavenging.
1086.06	General Restrictions and Specifically Prohibited Acts.	1086.13	Procurement of Recycled Products by County.
1086.07	Separation of Recyclable Material at Source.	1086.14	Notice; Appeals.
		1086.15	Equitable Remedies.
		1086.99	Penalty.

CROSS REFERENCES

Regulation of garbage and refuse pickup and disposal services - see Code of Va. ' 15.2-930
Separation of solid waste for recycling - see Code of Va. ' 15.2-937
Preference of recycled paper products in purchasing - see Code of Va. ' 15.2-938
Requirement for recycling reports - see Code of Va. ' 15.2-939
Throwing or depositing injurious or hazardous materials upon highways - see TRAF. 442.01
Beverage container litter control - see GEN. OFF. Ch. 606
Dog waste - see GEN. OFF. 612.19(a)(9)
Solid waste management facilities - see S.U. & P.S. 1080
Solid waste storage - see S.U. & P.S. Ch. 1082
Solid waste collection and transportation - see S.U. & P.S. Ch. 1084
Land application of biosolids - see S.U. & P.S. Ch. 1090

1086.01 SHORT TITLE.

This chapter shall be known and may be cited as the "Loudoun County Solid Waste Reduction and Recycling Ordinance."

1086.02 DEFINITIONS.

As used in this Chapter, the singular includes the plural, and vice versa, and the masculine includes the feminine, and vice versa. Definitions not included in this Section

shall assume the meanings included in Part I, 9 VAC 20-80, 9 VAC 20-101, and 9 VAC 20-130.

The following words and terms, when used in this Chapter, shall have the following meanings:

- (1) "Approved facility" means a location that is permitted in accordance with Chapter 1080 of these Codified Ordinances to receive solid waste or recyclable material for storage, disposal, transfer, processing, treatment, recycling, or composting. An approved facility includes, but is not limited to, permitted transfer stations, materials recovery facilities, sanitary landfills, yard waste composting facilities, and vegetative waste management facilities.
- (2) "Business" means a business, corporation, association, firm, partnership, joint stock company, county, city, town, governmental body, or any other legal entity. The term business does not include single and multiple residential facilities.
- (3) "Collection services" means the collection, removal, transportation, or disposal of solid waste for compensation.
- (4) "Collector" means any person engaged in collecting, removing, transporting, or disposing of solid waste or recyclable material for compensation from two or more residential, commercial or industrial establishments in the County.
- (5) "Commercial waste" means all solid waste generated by establishments engaged in business operations other than manufacturing or construction. Commercial waste includes, but is not limited to, solid waste resulting from the operation of stores, markets, office buildings, restaurants, and shopping centers.
- (6) "Customer" means any person that provides compensation to a collector for collection services or recycling services.
- (7) "Director of the Office of Solid Waste Management" or "Director" means the Director of the Office of Solid Waste Management of Loudoun County, or his or

her authorized agent, responsible for the administration and enforcement of this Chapter.

- (8) "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, throwing or placing of any solid waste into or on any land or water so that such solid waste or any constituent thereof may enter the environment, be emitted into the air or be discharged into any waters.
- (9) "Garbage" means readily putrescible discarded materials composed of animal, vegetable, or other organic matter.
- (10) Household means attached and detached single and multiple residences, including but not limited to, houses, apartment buildings, condominiums, townhouses, mobile homes, bunkhouses, and crew quarters.
- (11) "Household waste" means any waste material, including garbage, trash, and refuse, derived from households.
- (12) "Industrial waste" means any solid waste generated by manufacturing or industrial process that is not a regulated hazardous waste. Industrial waste may include, but is not limited to, waste resulting from the following manufacturing processes: electrical power generation; fertilizer/agricultural chemicals; food and related products/byproducts; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.
- (13) "Institutional waste" means all solid waste emanating from institutions such as, but not limited to, hospitals, nursing homes, orphanages, and public or private schools.

- (14) "Litter" means any solid waste that is discarded or scattered about outside of a lawful container or collection vehicle.
- (15) "Mulch" means woody waste consisting of stumps, trees, limbs, branches, bark, leaves, and other clean wood waste which has undergone size reduction by grinding, shredding, or chipping.
- (16) "Municipal solid waste" means that waste which is normally composed of residential, commercial, and institutional solid waste.
- (17) "Nuisance" means an activity which unreasonably interferes with an individual's or the public's comfort, convenience or enjoyment such that it interferes with the rights of others by causing damage, annoyance or inconvenience, and as defined in Section 648.03(g) of these Codified Ordinances.
- (18) "Office of Solid Waste Management" or "OSWM" means the Office of Solid Waste Management of Loudoun County.
- (19) "Permit" means the official document signed by the Director which allows the operation of a collection vehicle(s) in Loudoun County for purposes of providing collection services or recycling services.
- (20) "Person" means an individual or household. Households include single and multiple residential facilities that generate household waste.
- (21) "Principal recyclable materials" means paper, metal (except automobile bodies), plastic, glass, yard waste, wood, and textiles. Principal recyclable materials do not include large diameter tree stumps (tree stumps larger than six inches in diameter).
- (22) "Reclaimed material" means a material which is processed or reprocessed to recover a usable product or is regenerated to a usable form.
- (23) "Recyclable material" means any material separated from the waste stream for utilization as a raw material in the manufacture of a new product. The term

"recyclable material" includes both source separated material and mechanically separated material.

- (24) "Recycled material" means a material that is derived from recycling.
- (25) "Recycling" means the process of separating a given waste material from the waste stream and processing it so that it may be used again as a raw material for a product, which may or may not be similar to the original product. For the purposes of this Chapter, recycling does not include processes that only involve size reduction.
- (26) "Recycling drop-off center" means a lawful collection site for the acceptance by donation, redemption, or purchase of recyclable material from the public. Such a facility does not use power-driven processing equipment.
- (27) "Recycling facility" means a facility which collects, processes, repackages, and markets previously separated recyclable material. The term recycling facility does not include solid waste transfer stations, materials recovery facilities, sanitary landfills, yard waste composting facilities, or vegetative waste management facilities.
- (28) "Recycling services" means the collection of source-separated recyclable material and ensuring the delivery of the recyclable material to a recycling facility or other lawful facility for its ultimate disposition as a recycled material.
- (29) "Refuse" means all solid waste products having the character of solids rather than liquids and which are composed wholly or partially of materials such as garbage, trash, rubbish, litter, residues from clean up of spills or contamination, or other discarded materials.
- (30) "Residential waste" means any waste material, including garbage, trash, and refuse, derived from households. Households include single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas.

- (31) "Resource recovery" means the recovery of material or energy from solid waste.
- (32) "Rubbish" means combustible or slowly putrescible discarded materials which include, but are not limited to trees, wood, leaves, trimmings from shrubs or trees, printed matter, plastic and paper products, grass, rags, and other combustible or slowly putrescible materials not included under the term garbage.
- (33) "Scrap metal" means bits and pieces of metal parts such as bars, rods, wire, or metal pieces that may be combined together with bolts or soldering which are discarded materials and can be recycled.
- (34) "Site" means all land and structures, other appurtenances and improvements thereon used for treating, storing, and disposing of solid waste. "Site" includes adjacent land within the facility boundary used for the utility systems, such as repair, storage, shipping, or processing areas, or other areas incident to the management of solid waste. Further, "site" includes all sites, whether they are planned and managed facilities or open dumps.
- (35) "Solid waste" means any garbage, refuse, sludge, or other discarded material, including solid, liquid, semisolid, or contained gaseous material, resulting from household disposal, commercial and industrial operations, agricultural operations, or community activities. "Solid waste" does not include solid or dissolved materials in domestic sewage, solid or dissolved materials in irrigation return flows, industrial discharges or special nuclear or by-product materials.
- (36) "Solid waste management facility" or "SWMF" means a site used for the planned treating, recycling, storing and disposing of solid waste. A facility may consist of several treatment, storage or disposal units. Further, "solid waste management facility" or "SWMF" means a facility so located, designed and operated that it does not impose a present or potential hazard to human health

or the environment, including the pollution of air, land, surface water or ground water.

(37) "Source-separated means materials separated from the waste stream, by the waste generator, specifically for use, reuse, or recycling.

(38) "Yard waste" means decomposable waste materials generated by yard and lawn care and includes leaves, grass trimmings, brush, wood chips, and shrub and tree trimmings. Yard waste shall not include roots or stumps that exceed six inches in diameter.

1086.03 APPLICABILITY AND EXCLUSIONS.

(a) Applicability. This Chapter shall apply to any person that resides or any business that is located within Loudoun County and generates solid waste. This Chapter shall not affect the right of any person to sell or otherwise dispose of solid waste material as provided in Section 15.2-933 of the Code of Virginia or permitted under any other law of the Commonwealth of Virginia. Nothing in this Chapter abridges the right of any person to give or sell their recyclable material and/or yard waste to any recycling center or program lawfully operated for profit, non-profit, or charitable purposes. This Chapter shall not impose any liability upon any apartment or commercial office building owner or manager for failure of tenants to comply with the requirements for the separation of recyclable material nor upon any collector or transporter of recyclable material for failure of its customers to comply with the requirements for the separation of recyclable material, provided that such owner, manager, and collector provide a recycling system for tenants, employees, and/or customers in accordance with this Chapter and Chapter 1084 of these Codified Ordinances.

(b) Exclusions. This Chapter shall not apply to any person that resides or any business that is located solely in any incorporated town within the boundaries of Loudoun

County unless and until the governing body of any such town, by appropriate action, indicates its intention to have recyclable material covered by the provisions of this Chapter.

Upon the taking of such action by the governing body of any such incorporated town, the provisions of this Chapter shall apply fully in such incorporated town.

1086.04 PURPOSE.

The general purpose of this chapter is the furtherance of effective solid waste management and the recycling of solid waste as provided for in Section 10.1-1411 of the Code of Virginia of 1950, as amended, and as authorized by Section 15.2-937 of the Code of Virginia of 1950, as amended.

1086.05 ADMINISTRATION AND ENFORCEMENT.

(a) Administrative Authority. The Director of Solid Waste Management, or his or her agent, shall be responsible for the administration of this Chapter and shall have the authority to enforce compliance through the use of criminal and civil penalties as authorized by this Chapter.

(b) Right of Entry. The Director, or his or her agent, may, with proper identification, enter, at reasonable times, upon public or private property for the purposes of inspecting and investigating conditions relating to the enforcement of this Chapter, but only after obtaining consent of the owner or occupant of the private property to be inspected, which owner or occupant has the authority, under law, to authorize such entry and inspection.

(c) Inspection Warrant.

- (1) If such consent is not obtained for any reason or a justifiable reason exists for not seeking consent, including the inability to contact or locate the person with the authority to authorize such inspection, the Director shall

obtain, from a County magistrate or judge, a warrant authorizing such entry, inspection or investigation upon such private property upon a showing of probable cause, supported by an affidavit, particularly describing the place, thing, or person to be inspected or investigated, and the purpose for which the inspection or investigation is to be made. Probable cause shall be deemed to exist either if reasonable administrative standards for conducting such inspection or investigation are satisfied, with respect to the particular place, thing or person, or if there exists probable cause to believe that there is a condition, object, activity, or circumstance which legally justifies such inspection or investigation. The supporting affidavit shall contain either a statement that consent to inspect or investigate has been sought and refused or not received or a description of the circumstances reasonably justifying the failure to seek such consent in order to effectively enforce this Chapter.

- (2) An inspection warrant shall be effective for the time specified therein, not to exceed ten days, unless extended or renewed by the judicial officer who signed and issued the original warrant, upon a showing that such extension or renewal is in the public interest. Such warrant shall be executed and returned to the judicial officer by whom it was issued within the time specified in the warrant or within the extended or renewed time. After the expiration of such time, the warrant, unless executed, shall be void. An inspection pursuant to such warrant may not be made in the absence of the owner, custodian or possessor of the particular place, thing, or person unless specifically authorized by the judicial officer upon a showing that such authority is reasonably necessary to effectuate the purpose of this Chapter. An inspection pursuant to this warrant shall not be made by means of forcible entry, except that the judicial officer may expressly

authorize a forcible entry where facts are shown sufficient to create a reasonable suspicion of a violation of any of the provisions of this Chapter which, if such violation existed, would be an immediate threat to health or safety, or where facts are shown establishing that reasonable attempts to serve a previous warrant have been unsuccessful. In the case of inspection of a dwelling, prior consent must be sought and refused, unless the issuing judicial officer finds that failure to seek consent is justified and that there is a reasonable suspicion of an immediate threat to public health or safety.

(d) Compliance With Inspection Warrants. No person shall willfully refuse to permit an inspection lawfully authorized by a warrant issued pursuant to this Chapter.

1086.06 GENERAL RESTRICTIONS AND SPECIFICALLY PROHIBITED ACTS.

(a) General Restrictions. No person residing in Loudoun County shall fail to separate recyclable material from household solid waste for recycling, nor shall any business within the County fail to separate at least one principal recyclable material from its waste stream for recycling. Recyclable material may not be disposed as solid waste but shall be deposited only at a lawful recycling drop-off center, recycling facility, approved facility, or through a permitted collector that provides recycling services.

(b) Specifically Prohibited Acts. No person shall engage in any specifically prohibited act. Commission of a specifically prohibited act shall be grounds for enforcement actions and penalties as specified in this Chapter.

(1) No unauthorized person shall remove or cause to be removed, any recyclable material which has been deposited in or at an approved container for the purpose of collection by an authorized recycling collector.

- (2) No owner or manager of any apartment, commercial office building, strip mall, or business shall fail to provide a recycling system to its tenants, employees, and/or customers.
- (3) No person shall willfully dispose of source separated recyclable material as solid waste.
- (4) No person shall mix source separated recyclable material with solid waste intended for disposal.
- (5) No person shall cause the contamination of source separated recyclable material by mixing or causing to be mixed such recyclable material with solid waste or other incompatible recyclable material.
- (6) No person shall knowingly contract for collection or recycling services with a collector that is not permitted in Loudoun County, if such collector is required to be permitted under Chapter 1084 of these Codified Ordinances.

1086.07 SEPARATION OF RECYCLABLE MATERIAL AT SOURCE.

(a) General Requirement. Any person who resides within Loudoun County shall source separate recyclable material as required under this Chapter from his/her household waste and deposit such recyclable material at a recycling drop-off center, recycling facility, approved facility, or make such recyclable material available for collection by a permitted collector that provides recycling services. Multi-family residential facilities shall ensure that each living unit has access to a container or containers suitable for the collection of recyclable material as required under this Chapter; such containers provided shall be of adequate size to contain the recyclable material generated. Any business located within Loudoun County shall source separate from its solid waste stream at least one principal recyclable material and deposit such recyclable material at a recycling drop-off center, recycling facility, approved facility, or make such recyclable material available for collection by a permitted collector that provides recycling services. The frequency of collection for

all recyclable material shall not be less than once every two weeks. Recycled material required for separation, collection, and recycling may not be accumulated speculatively or treated in a manner constituting disposal.

(b) Source Separation by Households. Any person shall source separate the following recyclable material from his/her household waste, at a minimum:

(1) As of January 1, 2003:

- A. Newspaper and magazines;
- B. Container glass, metal and aluminum cans, and plastic beverage and detergent containers.

(2) As of July 1, 2003:

- A. Newspaper and magazines;
- B. Container glass, metal and aluminum cans, and plastic beverage and detergent containers;
- C. Cardboard and paperboard;
- D. Yard waste, providing that such person has contracted with a collector that provides recycling services for yard waste. Any person whose permitted collector does not provide recycling services for yard waste shall not be required to source separate yard waste for recycling and may dispose of yard waste as solid waste.

(c) Source Separation by Businesses. As of October 1, 2003, any business shall separate from its solid waste stream (commercial, industrial, and institutional waste) at least one principal recyclable material that such business generates annually in the greatest quantity. In multi-tenant commercial properties in which individual businesses do not manage their own solid waste, the principal recyclable material separated shall be determined on the basis of the property's combined waste stream. Any business shall be

responsible and held liable for the failure of its employees to comply with the requirements for both the separation of recyclable material from the waste stream of such business and the lawful deposition of the resulting source separated recyclable material.

1086.08 NOTIFICATION.

It shall be the responsibility of the property owner, business owner, or managing agent of any business or multiple residential facility to notify, in writing, its tenants and employees that recycling participation is mandatory. Written notification shall be provided within five (5) days to all new tenants and employees and no less frequently than annually thereafter to all existing tenants and employees. The written notification shall set forth the requirements of this Chapter and include, at a minimum:

- (a) Source separation of recyclable material from the waste stream is mandatory for all tenants and employees;
- (b) What material(s) will be recycled;
- (c) How the recyclable material will be prepared;
- (d) Any set-out requirements;
- (e) Location of recycling containers;
- (f) Prohibitions against contamination of source separated recyclable material;
- (g) The collection schedule for recyclable material;
- (h) Name and telephone number of a representative of the business or multiple residential facility whom the tenant or employee should contact with any questions.

1086.09 SET-OUT REQUIREMENTS.

(a) General Requirements. Materials intended for recycling shall be set out separately from solid waste. Any person shall adhere to the set out requirements for recyclable material consistent with the provisions of this Chapter, Chapter 1084 of these

Codified Ordinances, and the set-out requirements specified by their collector. Recyclable material storage containers shall be adequately covered or secured and maintained so as to prevent blowing, spilling, littering, or leaking of the recyclable material contained therein.

In no event shall recyclable material be set out in plastic bags nor shall any plastic bags be deposited in any recycling container that is not specifically marked as accepting plastic bags. Recyclable material shall be placed in a designated recycling container or set out curbside in accordance with this Section for collection by a permitted collector that provides recycling services. No permitted collector shall be required to collect from any customer recyclable material that does not conform with the set-out requirements specified in this Chapter.

(b) Newspaper and Magazines. Newspaper and magazines shall be segregated from solid waste and not commingled with other recyclable material. Newspaper and magazines set out for collection shall be securely bundled with string or twine, or placed in a brown kraft paper bag, or loose in a reusable bin or container appropriate for recyclable material.

(c) Glass, Metal, and Plastic. Glass containers, metal and aluminum cans, and plastic beverage and detergent containers shall be segregated from solid waste and not commingled with other recyclable material. All containers and cans shall be rinsed and free of all organic material and free-flowing liquids. Glass and plastic containers and metal and aluminum cans may be comingled and shall be set out for collection in a reusable bin or container appropriate for recyclable material.

(d) Cardboard and Paperboard. Cardboard and paperboard shall be segregated from solid waste and not comingled with other recyclable material. Cardboard and paperboard set out for collection shall be free of any organic material and free-flowing

liquids. Cardboard and paperboard set out for collection shall be flattened and securely bundled with string or twine, or placed in a brown kraft paper bag, or loose in a reusable bin or container appropriate for recyclable material. Any cardboard or paperboard set out for collection that is larger than 24- by 24-inches in size when flattened, shall be cut down to meet any size limits required by the collector, provided that such size limits are not smaller than a 24- by 24-inch square.

(e) Yard Waste. Yard waste, including but not limited to grass clippings, leaves, and brush, that is not either mulched or composted on the site of generation for reuse on the site of generation must be source separated for collection and recycling. Yard waste set out for collection shall be containerized in a brown kraft paper bag or reusable bin or container. Yard waste intended for recycling shall not be containerized in plastic bags, and no collector shall be required to collect yard waste set out in plastic bags. Yard waste intended for recycling shall not be contaminated by solid waste or other than an incidental amount of soil or rock.

1086.10 REPORTING.

(a) Required. Any business which separates recyclable material from its solid waste stream and such source separated recyclable material is collected and transported by other than a collector permitted in Loudoun County shall submit an annual recycling report to the Director on a form provided by the Director. Recycling reports shall be submitted for the period from January through December by no later than January 31 for the preceding year. Failure to submit any annual recycling report in accordance with this Section shall be considered a violation and may result in enforcement actions and penalties as authorized by this Chapter.

(b) Recycling Report Information. The annual recycling report shall include information pertaining to recyclable material source separated and collected in Loudoun County for the specified period of time. A report shall be certified and signed by a responsible company official. All measurements included in any report shall be based on the weight of each type of recyclable material reported, provided that where such measurements cannot be accurately determined, the measurement shall be based on carefully estimated data. Where estimates are submitted, such estimates shall contain sufficient detail to reasonably describe how the estimate was prepared. The report shall contain, at a minimum, the following nonproprietary information:

- (1) Name and address of the reporting business;
- (2) Period of time covered by the report;
- (3) Type of recyclable material that is source separated;
- (4) Amount (weight in tons) of source separated recyclable material;
- (5) Name(s) and address(es) of collector or transporter of recyclable material;
- (6) Amount (weight in tons) of recyclable material recycled or diverted and location of recycling facility or diversion location.

(c) Documentation. Supporting documentation used in the preparation of any recycling report shall be retained for purposes of audit, inspection, and/or clarification of reported data by the Director for a period of four (4) years following submissions of such report. Such documentation shall include, but not be limited to, weight or volume receipts received from recycling facilities and weight or volume receipts received from the marketing of collected materials at recycling or redemption centers. Such documentation shall be utilized by the Director to facilitate compliance with the requirements of Section 10.1-1411 of the Code of Virginia.

1086.11 RECYCLING DROP-OFF CENTERS.

It shall be unlawful for any person to litter or deposit solid waste at any recycling drop-off center. No person shall deposit any waste or material in any recycling container that is not specifically marked to accept such waste or material. No person shall cause the discharge or spilling of recyclable material from any container nor place recyclable material outside the designated container. It shall be unlawful for any person to vandalize, destroy, or damage any container or the contents of any container. No unauthorized person shall climb on nor enter any container.

1086.12 SCAVENGING.

It shall be unlawful for any unauthorized person to salvage or otherwise remove any recyclable material from recycling routes, recycling drop-off centers, or the County landfill.

1086.13 PROCUREMENT OF RECYCLED PRODUCTS BY COUNTY.

In determining the award of a contract for paper or paper products to be purchased for use by any division, department, or agency of Loudoun County, the County purchasing agent shall use competitive sealed bids and shall award the contract to the lowest responsible and responsive bidder offering recycled paper products of a quality suitable for the purpose intended, so long as the bid price is not more than ten percent greater than the bid price of the lowest responsive and responsible bidder offering a product that does not qualify as a recycled paper product under the U.S. Environmental Protection Agency's Comprehensive Procurement Guideline and Recovered Materials Advisory Notices.

1084.14 NOTICE; APPEALS.

(a) If the Director determines that a person has failed to comply with any of the provisions of this Chapter, the Director shall immediately serve or have served upon the person, by hand delivery or by registered or certified mail, to the address indicated in

County records a notice of violation. Such notice shall set forth specifically the violation, the corrective action needed to be taken by such person to come into compliance with this Chapter, and the time frame within which such corrective action shall be completed. If the person fails to comply within the time specified or to initiate the required corrective action within a reasonable time after such notice, such person shall be subject to any additional enforcement action and penalties provided for in this Chapter.

(b) A person or business cited with a Notice of Violation may appeal to the Director within thirty (30) days after the date of issuance of the Notice of Violation. Within thirty (30) days of receipt of the appeal, the Director will notify the appellant, in writing by registered or certified mail, return receipt requested, as to the Director's final determination. If the appellant disagrees with the Director's final determination, that person or business may appeal, in writing, within thirty (30) days of receipt of the final determination, directly to the County Administrator. The County Administrator, or his or her designee, shall render a decision as to the appeal and notify both the appellant and the Director, in writing, within thirty (30) days of receipt of the request for appeal. All administrative appeals must be made in writing and shall include justification for the appeal and any supporting documents. Failure to appeal within the period specified herein will constitute a waiver of any administrative or judicial remedies.

1086.15 EQUITABLE REMEDIES.

In addition to the penalty provided in Section 1086.99, the Director may initiate injunction, mandamus, abatement or any other appropriate action to prevent, enjoin, abate or remove a violation of any of the provisions of this Chapter.

1086.99 PENALTY.

(a) No criminal penalties shall be imposed for failure to comply with this Chapter, except for Section 1086.05. A violation of any provision of this Chapter, except for Section 1086.05, shall be punishable by a civil penalty not to exceed two hundred dollars (\$200.00) for each offense. Each day upon which a violation occurs or continues shall constitute a separate offense.

(b) Whoever fails to comply with a valid warrant obtained pursuant to Section 1086.05 is guilty of a Class 3 misdemeanor and shall be fined not more than five hundred dollars (\$500.00).

APPENDIX G

SOLID WASTE COLLECTORS, 2003

NOTE: The text in this Plan refers to the solid waste collectors permitted in 2003. At time of publication, this appendix was updated to include the list of permitted solid waste collectors in 2003.

Major Collectors (9)		
AAA Disposal, Inc. (C) (R) 4619 West Ox Road Fairfax, VA 22030 Telephone: 703-803-1365	Waste Management of Northern Virginia (C) (R) 1505 Moran Rd Sterling VA 20166 Telephone: 703-777-9620	BFI Waste Services, Winchester Division (C) 407 Lenoir Drive Winchester, VA 22603 Telephone: 540-667-7474
BFI Waste Services of Northern Virginia (C) (R) 2813 Juniper Street Fairfax, VA 22031 Telephone: 703-560-8866 http://www.bfi.com	Con-Serv Industries, Inc. (C) (R) P.O. Box 650490 Sterling, VA 20165 Telephone: 703-444-3181	American Disposal Services (C) (R) PO Box 1326 Centreville, VA 20122 Telephone: 703-368-0500
Trash Away (C) 1225 First Street Alexandria, VA 22314 Telephone: 703-838-9020	Tanncor, Inc. (C) 11352 Industrial Rd. Manassass, VA 20109 Telephone: 800-635-6114	Valley Waste Disposal (C) (R) 4199-G Winchester Road Marshall, VA 20116 Telephone: 800-747-6976
Minor Collectors (14)		
Robinson's Refuse (C) (R) P.O. Box 2275 Middleburg, VA 20118 Telephone: 540-687-6336	Francis Lewis Trash Service (C) (R) P.O. Box 123 Lincoln, VA 20160 Telephone: 703-771-7489	M.H.E. (C) (R) 41 W. Bethel St. Hagerstown, MD 21740 Telephone: 301-416-8213
Arthur Phillips (C) (R) 604 Wirt Street SW Leesburg, VA 20175 Telephone: 703-777-7865	Middleburg Maintenance (C) (R) P.O. Box 1688 Middleburg, VA 20177 Telephone: 540-687-6780	Fox Trash Services (C) (R) 5268 Panhandle Road Front Royal, VA 22630 Telephone: 703-327-4311
B&B Refuse Service (C) (R) P.O. Box 386 Berryville, VA 22611 Telephone: 800-326-9986	Scott's Trash Service (C) (R) P.O. Box 824 Sterling, VA 20167 Telephone: 703-777-9547	H.H. Williams Trash Service (C) (R) P.O. Box 717 Purcellville, VA 20134 Telephone: 540-338-6414
Simm's Trash Service (C) (R) P.O. Box 4150 Leesburg, VA 20175 Telephone: 703-777-2538	Brent's Refuse Service (C) (R) 35086 Scotland Heights Road Roundhill, VA 21041 Telephone: 540-338-4712	Loudoun Construction/Cheap Eddies (C) 38213 North Fork Road Purcellville, VA 20132 Telephone: 540-338-2345
James Jackson (C) (R) 25926 Elk Lick Road Chantilly, VA Telephone: 703 -327-4253	H & H Trash Service (Hickman) (R) 39014 Householder Rd. Lovettsville, VA 20180 Telephone: 540-822-5575	

Notes: (R) = Residential Services Provided
(C) = Commercial Services Provided

APPENDIX G
SOLID WASTE COLLECTORS, 2003

Special Waste Collectors (7)		
A & A Environmental 195 Wyche Road Stafford, VA 22554 Contact: Craig Childress Telephone: 703-441-6930 Materials: HHW, Motor Oil, Antifreeze, CESQG, RMW- Sharps and 32 gallon boxes (MUST CALL)	Environmental Management Services, Inc. Rockville, MD Contact: Veronica Hudak Telephone: 301-309-0475 Materials: HHW, Motor Oil, Antifreeze, CESQG, RMW- Sharps and 32 gallon boxes (MUST CALL)	US Filter Alexandria, VA Telephone: 888-749-8344 Materials: Motor Oil, Antifreeze
Care Environmental Denville, NJ Contact: Marc Kodrowski Telephone: 800-434-2273 Materials: HHW, CESQG	Mid-States Oil Refining Company Baltimore, MD Telephone: 800-331-5408 Materials: Motor Oil	
Clean Harbors d.b.a. Safety Kleen Laurel, MD Contact: Kevin Malone Telephone: 301-939-6030 Contact: Patti Miller Telephone: 800-444-4244 Materials: HHW, Motor Oil, Antifreeze, CESQG	Safety Kleen Manassas, VA Contact: Derek Patterson Telephone: 703-331-0516 Materials: HHW, Motor Oil, Antifreeze, CESQG, RMW- Sharps possible (MUST CALL)	

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN - 2003

APPENDIX H – CHAPTER 1082

CHAPTER 1082 Solid Waste Storage

EDITOR'S NOTE: Chapter 1082, previously titled "Rural Refuse Collection Sites," and being a codification of an unnumbered ordinance passed on May 16, 1977, was re-titled and re-enacted in its entirety by Ordinance 92-08, passed August 5, 1992.

1082.01	Short title.	1082.06 Storage practices.
1082.02	Definitions.	1082.07 Storage containers.
1082.03	Administration and enforcement; right of entry.	1082.08 Frequency of collection.
1082.04	Prohibitions.	1082.09 Equitable remedies.
1082.05	Responsibility of owners, occupants and custodians.	1082.99 Penalty.

CROSS REFERENCES

Regulation of garbage and refuse pickup and disposal services –see Code of Va. § 15.2-931
Separation of solid waste for recycling -see Code of Va. § 15.2-937
Preference of recycled paper products in purchasing -see Code of Va. §15.2-938
Requirement for recycling reports -see Code of Va. §15.2-939
Throwing or depositing injurious or hazardous materials upon highways -see TRAF. 442.01
Beverage container litter control. see GEN. OFF. Ch. 606
Dog waste. see GEN. OFF. 612.19(a)(9)
Solid waste collection and transportation. see S. U. & P .S. Ch. 1084
Solid waste reduction and recycling. see S. U. & P .S. Ch. 1086
Land application of biosolids .see 8. U. & P .8. Ch. 1090

1082.01 SHORT TITLE.

This chapter shall be known and may be cited as the "Loudoun County Solid Waste Storage Ordinance."
(Ord. 92-08. Passed 8-5-92.)

1082.02 DEFINITIONS.

Words and terms used in this chapter shall be defined as provided in Section 1080.02.
(Ord. 92-08. Passed 8-5-92.)

1082.03 ADMINISTRATION AND ENFORCEMENT; RIGHT OF ENTRY.

The health Director, or his or her agent, shall be responsible for the administration and enforcement of this chapter. The Health Director or his or her agent, may, with proper identification, enter, at reasonable times, upon public or private property for the purposes of inspecting and investigating conditions relating to the enforcement of this chapter, but only after obtaining consent of the owner or occupant of the private property to be inspected, which owner or occupant has the authority, under law, to authorize such entry and inspection. If such consent is not obtained, for any reason, including the inability to contact or locate the person with the authority to authorize such inspection, the Health Director shall obtain, from a County magistrate or judge, a warrant authorizing such entry, inspection or investigation upon such private property upon a showing of probable cause supported by an affidavit, particularly describing the place, thing or person to be inspected or investigated and the purpose for which the inspection or investigation is to be made. Probable cause shall be deemed to exist either if reasonable administrative standards for conducting such inspection or investigation are satisfied, with respect to the particular place, thing or person, or if there exists probable cause to believe that there is a condition, object, activity or circumstance which legally justifies such inspection or investigation. The supporting affidavit shall contain either a statement that consent to inspect or investigate has been sought and refused or not received or a description of the circumstances reasonably justifying the failure to seek such consent in order to effectively enforce this chapter. An inspection warrant shall be effective for the time specified therein, not to exceed ten days, unless extended or renewed by the judicial officer who signed and issued the original warrant, upon a showing that such extension or renewal is in the public interest. Such warrant shall be executed and returned to the judicial officer by whom it was issued within the time specified in the warrant or within the extended or renewed time. After the expiration of such time, the warrant, unless executed, shall be void. An inspection pursuant to such warrant may not be made in the absence of the owner, custodian or possessor of the particular place, thing or person unless specifically authorized by the judicial officer upon a showing that such authority is reasonably necessary to effectuate the purpose of this chapter. An inspection pursuant to this warrant shall not be made by means of forcible entry, except that the judicial officer may expressly authorize a forcible entry where facts are shown sufficient to create a reasonable suspicion of a violation of any of the provisions of this chapter which, if such violation existed, would be an immediate threat to health or safety, or where facts are shown establishing that reasonable attempts to serve a previous warrant have been unsuccessful. In the case of inspection of a dwelling, prior consent must be sought and refused unless the issuing judicial officer finds that failure to seek consent is justified and that there is a reasonable suspicion of an immediate threat to public health or safety. No person shall willfully refuse to permit an inspection lawfully authorized by a warrant issued pursuant to this chapter.

(Ord. 92-08. Passed 8-5-92.)

1082.04 PROHIBITIONS.

No person may engage in the removal, storage, disposal or treatment of solid waste in such a manner as to create a public nuisance, pollute the air, cause a discharge of pollutants to the waters of this County or otherwise impair the quality of the environment or create a hazard to the public safety, health or well-being.

(Ord. 92-08. Passed 8-5-92.)

1082.05 RESPONSIBILITY OF OWNERS, OCCUPANTS AND CUSTODIANS.

No person shall fail to provide for adequate storage and handling of solid waste III the premises of which he or she IS the owner, occupant or custodian and for :collection from such premises so as not to create a nuisance or an environmental or)public health hazard to neighboring properties. Any action or practice which is in violation of any of the requirements of this chapter shall be considered a violation)y the owner, occupant or custodian of the premises in question.

(Ord. 92-08. Passed 8-5-92.)

1082.06 STORAGE PRACTICES.

(a) Municipal solid waste shall be placed in storage containers as set forth in Section 1082.07. Such waste shall be drained free of liquids. Solid waste in bulk form or stored under a roof or covering is exempt from this provision.

(b) Before being placed in storage containers, garbage shall be wrapped in paper, plastic or other similar material.

(c) Items separated for recycling purposes shall be rinsed and drained of food :>articles.

(d) Excessive numbers of insects and rodent vectors shall be minimized around the location of storage containers by appropriate controls in order that vectors do not constitute a nuisance to neighboring properties or a health hazard.

(e) Before being stored, rubbish shall be placed in storage containers or cut and baled, tied, bundled, stacked or packaged so as not to exceed thirty-six inches in length and fifty pounds in weight, where such rubbish is to be collected and lifted by human rather than mechanical methods. However, this requirement shall not apply to recyclable materials stored on the ground at storage sites, provided that such materials are continually removed every thirty days. (Ord. 92-08. Passed 8-5-92.) .

1082.07 STORAGE CONTAINERS.

(a) Storage containers for municipal solid waste shall be made of durable, watertight, rust-resistant material having a closely-fitting lid and handles to facilitate collection.

(b) Storage containers for residences and businesses shall be of not less than ten gallon nor more than thirty-two gallon capacity, unless the containers are of the type that can be mechanically lifted and emptied by a collection vehicle, in which case they shall be of appropriate size and design. All storage containers shall be leak-proof.

(c) No person shall permit the accumulation of residue of liquids or solids or a combination of such materials on the bottom or sides of a container. The interior of a container shall be kept clean by thorough cleaning and sanitizing as often as necessary. _

(d) Storage containers shall be kept in good repair. Containers with loosely fitting lids or doors or containing holes or cracks shall not be used.

(e) All storage containers designed for mechanical lifting shall be designed, constructed and placed to prevent accidental overturning. Such containers shall be constructed of fire retardant material. Standards of the Federal Consumer Product Safety Commission shall be used in determining compliance with this subsection.

(Ord. 92-08. Passed 8-5-92.)

1082.08 FREQUENCY OF COLLECTION.

(a) Municipal solid waste shall be collected and transported to an approved disposal site not less than once every two weeks.

(b) Hotels, restaurants, institutions, apartments and commercial establishments may be required to have more frequent collections if such collection is determined by the Health Director, or his or her agent, to be advisable to protect the public health or to abate a public nuisance.

(Ord. 92-08. Passed 8-5-92.)

1082.09 EQUITABLE REMEDIES.

In addition to the penalty provided in Section 1082.99, the Health Director may initiate injunction, mandamus, abatement or any other appropriate action to prevent, enjoin, abate or remove a violation of any of the provisions of this chapter. (Ord. 92-08. Passed 8-5-92.)

1082.99 PENALTY.

(EDITOR'S NOTE: See Section 202.99 for general Code penalty if no specific penalty is provided.)

Whoever fails to comply with a valid warrant obtained pursuant to Section 1082.03 is guilty of a Class 3 misdemeanor and shall be fined not more than five hundred dollars (\$500.00).

(Ord. 92-08. Passed 8-5-92.)

APPENDIX I

PRIVATE SOLID WASTE MANAGEMENT FACILITIES IN LOUDOUN COUNTY

Facility Name and Address	Type of Facility	Type of Waste Accepted	Permitted Capacity	Physical Capacity	Year Permitted	Comments
Con-Serv Industries, Inc. 45713 Woodland Road Sterling	MRF	CDD; source separated recyclables	100 TPD	~500 TPD or ~156,000 TPY	1995	CSI provides CDD roll-off services and processes the waste at this facility.
Loudoun Composting, LLC 44150 Wade Drive Chantilly	VWMF (yard waste composting)	grass; leaves	not more than 45,000 tons on site	~55,000 TPY	1998	This facility accepts yard waste only from commercial or government entities.
Waste Management, Inc. 42228 Cochran Mill Road Leesburg	WTS	MSW; CDD	750 TPD	750 TPD or 234,750 TPY (see comments)	1992	A new facility will be constructed in 2003-2004 with a physical capacity of 1,500 TPD or 469,500 TPY.
Waste Management, Inc. 1505 Moran Road, Sterling	WTS	CDD; source separated recyclables	522 TPD	522 TPD or 163,386 TPY	1995	
William A. Hazel, Inc. 25020 Willard Road Chantilly	VWMF (mulch production)	vegetative waste (stumps & brush)	not more than 50,000 yds ³ on site	~22,000 TPY	1999	This facility accepts only waste generated by William A. Hazel, Inc.
Environmental Alternatives Route 50, Chantilly	MRF	CDD	this facility is not yet permitted	~400 TPD or ~125,200 TPY	NA	This facility is anticipated to be permitted in 2002-2003.

Notes:

CDD = construction demolition debris

TPD = tons per day

WTS = waste transfer station

CTO = Certificate to Operate (Loudoun County)

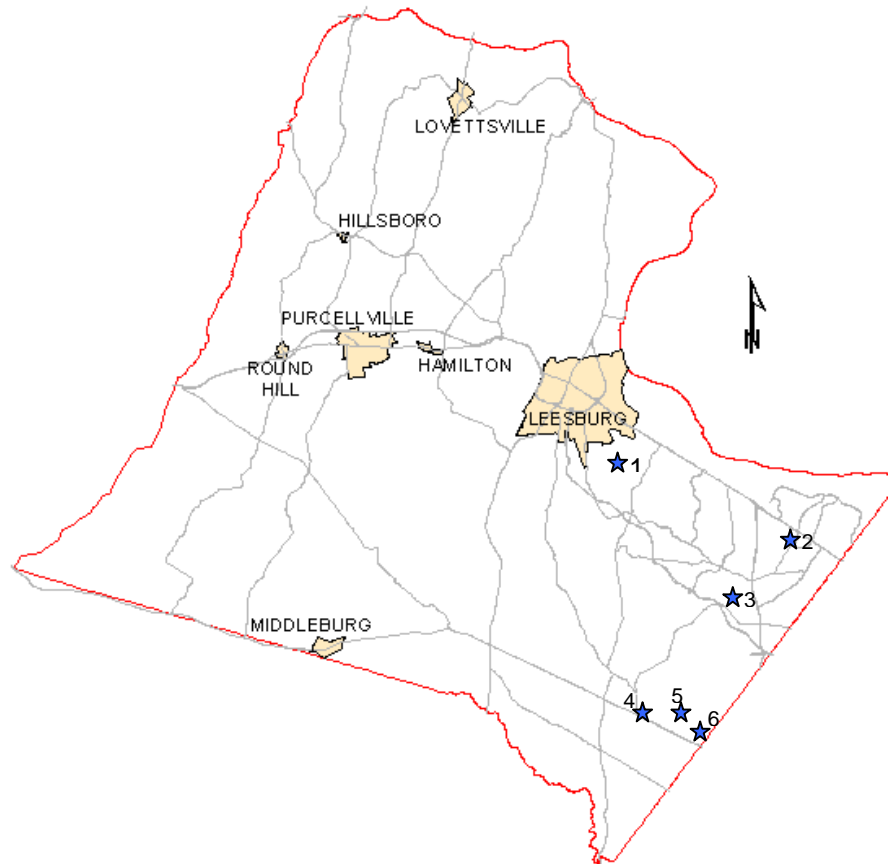
MSW = municipal solid waste

TPY = tons per year

VWMF = vegetative waste management facility

APPENDIX I

PRIVATE SOLID WASTE MANAGEMENT FACILITIES IN LOUDOUN COUNTY



1. Waste Management, Inc., MSW/CD Transfer Station
2. Con-Serv Industries, Inc., CD MRF
3. Waste Management, Inc., CD MRF
4. Environmental Alternatives Recycling, LLC, CD MRF
5. William A. Hazel, Inc., VWMF
6. Loudoun Composting, LLC, Yard Waste Composting

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLAN - 2003

APPENDIX J – CHAPTER 1080

69

TITLE EIGHT - Garbage and Rubbish
Chap. 1080. Solid Waste Management Facilities.
Chap. 1082. Solid Waste Storage.
Chap. 1084. Solid Waste Collection and Transportation.
Chap. 1086. Solid Waste Reduction and Recycling.
Chap. 1090. Land Application of Biosolids.

CHAPTER 1080

Solid Waste Management Facilities

EDITOR'S NOTE: This chapter, previously titled "Solid Waste Management," and being a codification of Ordinance 91-15, passed July 2, 1991, and Ordinance 91-23, passed September 17, 1991, was re-titled and re-enacted in its entirety by Ordinance 92-08, passed August 5, 1992. This chapter was re-enacted in its entirety again by Ordinance 98-14, passed November 18, 1998, and again by Ordinance 99-06, passed May 19, 1999.

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| 1080.01 Short title. | 1080.15 Appeals. |
| 1080.02 Definitions. | 1080.16 General construction and operation requirements. |
| 1080.03 Administration and enforcement; right of entry. | 1080.17 Design and performance standards. |
| 1080.04 General restrictions and specifically prohibited acts. | 1080.18 Site operations and operation plans. |
| 1080.05 Permits. | 1080.19 Closure. |
| 1080.06 Fees. | 1080.20 Recycling facilities. |
| 1080.07 Surety and insurance requirements. | 1080.205 Vegetative waste management and yard waste composting facilities. |
| 1080.08 Issuance or denial of permits. | 1080.21 Materials recovery facilities. |
| 1080.09 Certificate to Operate required. | 1080.22 Landfills. |
| 1080.10 Compliance with permits, Certificates to Operate, etc. | 1080.23 Solid waste transfer stations. |
| 1080.11 Inspections. | 1080.24 Solid waste incinerator facilities. |
| 1080.12 Amendments or attachment of additional conditions to permits. | 1080.25 Experimental solid waste management facilities. (Repealed) |
| 1080.13 Compliance orders. | 1080.26 Existing sites and facilities. (Repealed) |
| 1080.14 Revocation of permits and/or Certificates to Operate; stop-work orders; remedial measures. | 1080.27 Equitable remedies. |
| | 1080.99 Penalty. |

CROSS REFERENCES

Regulation of garbage and refuse pickup and disposal services - see Code of Va. §15.2-931
Separation of solid waste for recycling - see Code of Va. §15.2-937

Preference of recycled paper products in purchasing - see Code of Va. §15.2-938
Requirement for recycling reports - see Code of Va. §15.2-939
Throwing or depositing injurious or hazardous materials upon highways - see TRAF. 442.01
Beverage container litter control - see GEN. OFF. Ch. 606
Dog waste - see GEN. OFF. 612.19(a)(9)
Solid waste storage - see S.U. & P.S. Ch. 1082
Solid waste collection and transportation - see S.U. & P.S. Ch. 1084
Solid waste reduction and recycling - see S.U. & P.S. Ch. 1086
Land application of biosolids - see S.U. & P.S. Ch. 1090

1080.01 SHORT TITLE.

This chapter shall be known and may be cited as the "Loudoun County Solid Waste Management Facilities Ordinance."
(Ord. 99-06. Passed 5-19-99.)

1080.02 DEFINITIONS.

As used in this chapter, the singular includes the plural, and vice versa, and the masculine includes the feminine, and vice versa. Definitions not included in this section shall assume the meanings included in Part I, 9 VAC 20-80 and 9 VAC 20-101.

The following words and terms, when used in this chapter, shall have the following meanings:

- (1) "Abandoned facility" means any inactive solid waste management facility that has not met closure and post-closure requirements.
- (2) "Agricultural" means all solid waste produced from farming operations or related commercial preparation of farm products for marketing. Pesticides, herbicides and fertilizers or other chemicals identified in 9 VAC 20-60, or empty containers for such materials, are not considered agricultural waste.
- (3) "Agricultural operation" means any operation devoted to the bona fide production for sale of crops, animals or fowl, including, but not limited to, fruits and vegetables of all kinds; meat, dairy and poultry products; nuts, tobacco, nursery and floral products; and trees in such quantity and so spaced and maintained as to constitute a forest area.
- (4) "Air-curtain destructor" means a special incinerator device, usually erected for a temporary period of time, used to reduce the mass of land clearing products, such as stumps, which device conforms to specifications established by the Virginia Air Pollution Control Board and is approved for use with a permit granted by such Board.
- (5) "Approved facility" means a location permitted under this chapter to receive solid waste for disposal, transfer, processing, treatment, recycling or composting.
- (6) "Arboreal waste" means that portion of the solid waste stream consisting of tree stumps, logs, tree prunings, woody brush, leaves and minimal soil and rock materials usually, but not always, generated by land-clearing activities (debris wastes).
- (7) "Arboreal waste processing center" means an approved type of solid waste management facility wherein tree stumps, logs, tree prunings and woody brush are mechanically shredded, chipped, screened and sometimes bagged into mulch-like products for resale.
- (8) "Base flood" is as defined in Chapter 740.3(2) of the Loudoun County Zoning Ordinance.
- (9) "Biological waste" means feces, urine, vomitus, suctionings, live vaccines for animal use, blood, blood products and bodies or body parts.
- (10) "Bird hazard" means an increase in the likelihood of bird/aircraft collisions that may cause damage to aircraft or injury to its occupants.

- (11) "Board" means the Loudoun County Board of Supervisors.
- (12) "Buffer" means any device or natural growth, or combination thereof, which helps serve as a barrier to vision or noise between a solid waste management facility and adjoining property. No solid waste shall be deposited within the buffer area, herein defined as the area within a 300-foot setback from the facility property line, where such line abuts property zoned for residential use. Where the facility property line abuts property zoned for commercial or industrial use, the buffer areas shall have a minimum setback width of 200 feet from adjoining property lines. To the maximum extent feasible, this buffer area shall remain undisturbed, except for the following: storm water management ponds, ground water or methane gas monitoring facilities, access roads and fencing. Other uses will not be installed in buffer areas without approval of the Director of the Office of Solid Waste Management.
- (13) "Burial" means to dispose of by depositing in or on the earth's surface and covering with approved material.
- (14) "Cement bentonite grout" means a grout mixture consisting of neat Portland cement and four to six percent bentonite by volume.
- (15) "Certificate to Operate" or "CTO" means a document issued by the Director of the Office of Solid Waste Management that certifies that construction of a solid waste management facility is complete and in conformity with approved construction plans. Active operations may not commence before receipt of this Certificate. This Certificate postdates the issuance of a permit which authorizes construction.
- (16) "Clean fill" means natural soil, rock brick, ceramics or paving fragments which are virtually inert and pose neither a pollution threat to ground or surface waters nor a fire hazard.
- (17) "Closed facility" means a solid waste management facility which has been properly secured in accordance with an approved facility closure plan.
- (18) "Closure" means the act of securing a solid waste management facility pursuant to the requirements of this chapter.
- (19) "Collector" or "hauler" means any person engaged in the removing or transporting of solid waste for compensation from two or more residential, commercial or industrial establishments in the County, whether or not a portion of such activity is conducted outside the County.
- (20) "Compliance schedule" means a time schedule for measures to be employed on a solid waste management facility which will ultimately upgrade it to conform to the provisions of this chapter.
- (21) "Compost" means a stabilized organic product produced by a controlled aerobic decomposition process in such a manner that the product can be handled, stored and/or applied to the land without adversely affecting public health or the environment.
- (22) "Composted sludge" shall be as defined by the Virginia Sewerage Regulations.
- (23) "Composting" means the manipulation or control of the natural aerobic process of decomposition of organic materials that allows development of thermophilic temperature as a result of biologically produced heat, with the final product (compost) being sufficiently stable for storage or application to the soil.
- (24) "Construction/demolition/debris landfill" means a land burial facility engineered, constructed and operated to contain and isolate construction waste, demolition waste, debris-waste, inert waste or combinations of such solid wastes.
- (25) "Construction waste" means solid waste which is produced or generated during the construction of structures. Construction waste consists of lumber, wire, sheetrock, broken brick, shingles, glass, pipes, concrete, metal and plastic, provided that such metal or plastic is a part of the materials of construction or empty containers for such materials. Paints, coatings, solvents, asbestos, any liquid, compressed gases or semi-liquids and garbage are not construction wastes.
- (26) "Contamination" means the degradation above background of naturally occurring water, air or soil quality, either directly or indirectly, as a result of human activity.

- (27) "Controlled site" means the location of a solid waste management facility that is enclosed within a building or an impervious surface, such as concrete, and where runoff water is directed to an approved treatment facility.
- (28) "County regulatory agency" means any and all of the following County Departments: - Solid Waste Management, Public Health, and Building and Development.
- (29) "Cover material" means compactable soil or other approved material which is used to blanket solid waste in a landfill.
- (30) "Debris waste" means that portion of the solid waste stream consisting of tree stumps, logs, tree prunings, woody brush, leaves and minimal soil and rock materials that are usually, but not always, generated by land-clearing activities (arboreal wastes).
- (31) "Department of Environmental Quality" or "DEQ" means the Virginia Department of Environmental Quality.
- (32) "Director of the Office of Solid Waste Management" or "Director" means the Director of the Office of Solid Waste Management of Loudoun County, or his or her authorized agent, responsible for the administration and enforcement of this chapter.
- (33) "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste into or on any land or water so that such solid waste or any constituent thereof may enter the environment, be emitted into the air or be discharged into any waters.
- (34) "EPA" means the United States Environmental Protection Agency.
- (35) "Facilities Standards Manual" means the Facilities Standards Manual of the County.
- (36) "Flood plain" means any land area susceptible to being inundated by water from the base flood and having a drainage area greater than 100 acres. For purposes of regulation under this chapter, a distinction shall be made between flood plains in watersheds of greater than 640 acres and those in watersheds of less than 640 acres.
- (37) "Geologically unstable" means a site which, under normal conditions, is subject to sinkholes, sliding or collapsing.
- (38) "Ground water" means any water, except capillary moisture or unsaturated zone moisture, beneath the land surface in the zone of saturation or beneath the bed of any stream, lake, reservoir or other body of surface water within the boundaries of this Commonwealth, regardless of whatever may be the subsurface geologic structure in which such water stands, flows, percolates or otherwise occurs.
- (39) "Hazardous waste" has the same meaning as "hazardous waste" as described in the Virginia Hazardous Waste Regulations or by the EPA.
- (40) "Health Director" means the Health Director of Loudoun County, or his or her authorized agent.
- (41) "Household waste" means any waste material, including garbage, trash and refuse, derived from households. Households include single- and multiple-residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas.
- (42) "Incineration" means the controlled combustion of solid waste for disposal.
- (43) "Incinerator" means a facility or device designed for the treatment of solid waste by combustion.
- (44) "Inert waste" means solid waste which is physically, chemically and biologically stable from further degradation and considered to be nonreactive. Inert waste includes rubble, concrete, broken bricks, bricks and blocks.
- (45) "Infectious waste" means solid waste which contains pathogens with sufficient virulence and quantity so that exposure to such waste by a susceptible host could result in an infectious disease, and as defined in Part III of the Regulated Medical Waste Management Regulations 9 VAC 20-120.
- (46) "Karst" means a type of topography that is formed on limestone, gypsum and other rocks by dissolution, and that is characterized by sinkholes, caves and underground drainage.

- (47) "Landfill" means a solid waste facility which uses burial as the primary means of disposal and includes sanitary landfills, industrial waste landfills or construction/demolition/debris landfills.
- (48) "Landfill disposal area" means the area within the boundary of a landfill facility in which solid waste is buried or permitted for actual burial.
- (49) "Landscape maintenance" means the care of lawns, shrubbery and vines, and includes the pruning of trees.
- (50) "Leachate" means a liquid change that has passed through or emerged from solid waste and contains soluble and or suspended degradation products of waste. Leachate and any material with which it is mixed is solid waste, except that leachate that is pumped from a collection tank for transportation to disposal in an off-site facility is regulated as septage, and leachate discharged into a wastewater collection system is regulated as industrial wastewater.
- (51) "Lift" means the daily landfill layer of compacted solid waste plus the cover material.
- (52) "Litter" means any solid waste that is discarded or scattered about a solid waste management facility outside the immediate working area.
- (53) "Lower explosive limit" means the lowest concentration by volume of a mixture of explosive gases in air that will explode or burn in air at twenty-five degrees Celsius and at atmospheric pressure.
- (54) "Materials recovery" means a component of any comprehensive waste management program. The term "materials recovery" refers to the recovery of solid waste materials by source separation or mechanical means for resale into the secondary materials marketplace.
- (55) "Materials recovery facility" or "MRF" means a solid waste facility which collects mixed solid wastes and manually or mechanically separates recyclable materials to be marketed and disposes of all non-recyclable wastes to a permitted facility, or a solid waste management facility for the collection, recovery and processing of materials, such as metals, paper or glass, from solid waste for the production of a fuel from solid waste.
- (56) "Monitoring" means all methods, procedures and techniques used to systematically analyze, inspect and collect data on operational parameters of the facility or on the quality of air, groundwater, surface water, soils and soil gases.
- (57) "Monitoring well" means a well point below the ground surface used for the purpose of obtaining periodic samples from ground water for quantitative and qualitative analyses.
- (58) "Municipal solid waste" means that waste which is normally composed of residential, commercial, and institutional solid waste.
- (59) "Nuisance" means an activity which unreasonably interferes with an individual's or the public's comfort, convenience or enjoyment such that it interferes with the rights of others by causing damage, annoyance or inconvenience, and as defined in Section 648.03(g) of these Codified Ordinances.
- (60) "Office of Solid Waste Management" or "OSWM" means the Office of Solid Waste Management of Loudoun County.
- (61) "Open burning" means the combustion of solid waste without:
 - A. Control of combustion air to maintain adequate temperature for efficient combustion;
 - B. Containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; or
 - C. Control of the combustion products' emissions.
- (62) "Open dump" means a non-permitted site on which any solid waste is placed, discharged, deposited, injected, dumped or spilled so as to create a nuisance or potential hazard to human health or the environment, including the pollution of air, land, surface water or ground water, and/or any permitted site that does not comply with this chapter. For further details regarding open dumps, see Sections 1080.04 and

1080.05. Further, an open dump is a nuisance, as defined in Section 648.03(g) of these Codified Ordinances.

- (63) "Operational limits" means the solid waste disposal area as approved in the CTO.
- (64) "Operator" means the person responsible for the overall operation and site management of a solid waste management facility.
- (65) "Owner" means the person who owns a solid waste management facility or part of a solid waste management facility.
- (66) "Pathological waste" means solid waste that consists of human tissues, organs, body parts, fetuses, placentas, effluences or similar materials, or animal tissues, organs, body parts, fetuses, placentas, effluences or similar materials from animals exposed to human pathogens for the purposes of testing or experimentation.
- (67) "Perched water" means water that has become separated from the main ground water source by an impermeable layer of stratum and is capable of being recharged.
- (68) "Permit" means the official document signed by the Director to own, operate or construct a solid waste management facility. Operations of a solid waste facility also requires a CTO.
- (69) "Permit by rule" means a permit granted by the Virginia Department of Environmental Quality when provisions of the State Solid Waste or Vegetative Waste Regulations state that a facility or activity is deemed to have a permit if it meets the requirements of the provision.
- (70) "Permitted phase" means an area in an approved facility that is cleared, excavated and prepared in order that solid waste may be placed there.
- (71) "Plume" means a liquid or air distribution of a substance, decreasing in concentration from the point of origin, and generally used to portray the movement of concentrations of pollutants in ground water or air.
- (72) "Pollutant" means any substance which causes or contributes to, or may cause or contribute to, environmental degradation when discharged into the environment.
- (73) "Post-closure" means the requirements placed upon solid waste disposal facilities after closure to ensure environmental and public health safety for a specified number of years after closure.
- (74) "Progressive cover" means cover material placed over the working face of a solid waste disposal facility advancing over the deposited waste as new wastes are added, keeping the exposed area to a minimum.
- (75) "Prohibited wastes" means any waste that is radioactive, hazardous, infectious or pathological.
- (76) "Putrescible waste" means solid waste which contains organic material capable of being decomposed by micro-organisms and causes odors.
- (77) "Radioactive waste" or "nuclear waste" means:
 - A. "Low-level radioactive waste," which is material that:
 - 1. Is not high-level radioactive waste, spent nuclear fuel, transuranic waste or by-product material as defined in Section 11e(2) of the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2)); and
 - 2. The Nuclear Regulatory Commission, consistent with existing law, classifies as low-level radioactive waste; or
 - B. "High-level radioactive waste," which means:
 - 1. The highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations; and
 - 2. Other highly radioactive material that the Nuclear Regulatory Commission, consistent with existing law, determines, by rule, requires permanent isolation.
- (78) "RCRA" means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.) and the Hazardous and

Solid Waste Amendments of 1984, and the "Solid Waste Disposal Facility Criteria; Final Rule of October 1991" (40 CFR, Parts 257 and 258).

- (79) "Reclaimed material" means a material which is processed or reprocessed to recover a usable product or is regenerated to a usable form.
- (80) "Recyclable material" means any material separated from the waste stream for utilization as a raw material in the manufacture of a new product. The term "recyclable material" includes both source separated material and mechanically separated material. Recyclable materials include, but are not limited to, newspapers, office paper, glass, metal, plastic and corrugated cardboard.
- (81) "Recycled material" means a material which is used, reused or reclaimed.
- (82) "Recycling" means any process whereby material which would otherwise be solid waste is used or reused, or prepared for use or reuse, as an ingredient in an industrial process to make a product, or as an effective substitute for a commercial product.
- (83) "Recycling drop-off centers" means collection sites for the acceptance by donation, redemption or purchase of recyclable materials from the public. Such a facility does not use power-driven processing equipment.
- (84) "Recycling facility" means a solid waste facility which collects, repackages and markets previously separated recyclable materials.
- (85) "Recycling residue" means:
 - A. Nonmetallic substances, including, but not limited to, plastic, rubber and insulation, which remain, after a shredder has separated for purposes of recycling, the ferrous and nonferrous metal from a motor vehicle, appliance or other discarded metallic item; and
 - B. Organic waste remaining after removal of metals, glass, plastics and paper which are to be recycled as part of a resource recovery process for municipal solid waste resulting in the production of a refuse derived fuel.
- (86) "Resource recovery" means the recovery of material or energy from solid waste.
- (87) "Runoff" means the surface flow of water or waste water from any part of a solid waste management facility.
- (88) "Runon" means any rain water, leachate or other liquid that drains over land onto any part of a facility.
- (89) "Salvage" means the authorized controlled removal of waste materials from a solid waste management facility.
- (90) "Sanitary landfill" means an engineered land burial facility for the disposal of solid waste which is so located, designed, constructed and operated as to contain and isolate the solid waste so that it does not pose a substantial present or potential hazard to human health or the environment.
- (91) "Seasonal high water table" means a water table, normally perched, that occurs seasonally during wet periods, which is evidenced by observed water or chroma two mottles on a Munsell Soil Color Chart.
- (92) "Secure site" means a site where measures have been taken to ensure the minimization of erosion, the migration of contaminants or other nuisances off that site.
- (93) "Site" means all land and structures, other appurtenances and improvements thereon used for treating, storing and disposing of solid waste. The term "site" includes adjacent land used for utility systems, such as repair, storage, shipping or processing areas, or other areas incident to the management of solid waste. Further, the term "site" includes all sites, whether they are planned and managed facilities or open dumps.
- (94) "Sludge" means any solid, semi-solid or liquid waste generated from a municipal, commercial or industrial wastewater treatment plant, water supply treatment plant or air pollution control facility.
- (95) "Solid waste" means any garbage, refuse, demolition or debris waste and other discarded material resulting from household disposal, commercial and industrial operations, agricultural operations and community activities. The term "solid waste" shall not include solid or dissolved materials in domestic sewage, solid or dissolved

materials in irrigation return flows, industrial discharges or special nuclear or by-product materials.

- (96) "Solid waste boundary" means the outermost perimeter of the solid waste (projected on a horizontal plane) as it would exist at completion of the disposal activity.
- (97) "Solid waste management facility" or "SWMF" means a site used for the planned treating, recycling, storing and disposing of solid waste. A facility may consist of several treatment, storage or disposal units. Further, "solid waste management facility" or "SWMF" means a facility so located, designed and operated that it does not impose a present or potential hazard to human health or the environment, including the pollution of air, land, surface water or ground water.
- (98) "State Water Control Board" means the Commonwealth of Virginia State Water Control Board.
- (99) "Surface waters sampling sites" means upgradient and downgradient sample points on any stream within 100 feet of the property boundary and the content or outfall of any storm water management, sediment control or other drainage device serving the disposal site.
- (100) "SW-846" means "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, Second Edition, 1982, as amended by Update I (April, 1984), Update II (April, 1985) and the third edition, November, 1986.
- (101) "Transfer station" means any intermediate solid waste storage or collection facility at which solid waste is transferred from collection vehicles to haulage vehicles for transportation to a central solid waste management facility for disposal, incineration or resource recovery.
- (102) "Vector" means a living animal, insect or other arthropod which transmits an infectious disease from one organism to another.
- (103) "Vegetative waste" means decomposable materials generated by yard and lawn care or land clearing activities and includes, but is not limited to, leaves, grass trimmings, woody wastes such as shrub and tree prunings, bark, limbs, roots and stumps.
- (104) "Vegetative waste management facility" means a solid waste management facility that manages vegetative waste.
- (105) "Vegetative Waste Management and Yard Waste Composting Regulations" means the Vegetative Waste Management and Yard Waste Composting Regulations of the State of Virginia Code 9 VAC 20-101.
- (106) "Virginia Solid Waste Management Regulations" or "VSWMRs" means the Virginia Solid Waste Management Regulations of the State of Virginia.
- (107) "VPDES" means the Virginia Pollutant Discharge Elimination System regulation 9 VAC 25-30.
- (108) "Waste energy plant" means a solid waste management facility that uses a furnace or similar equipment to reduce the volume of solid waste while producing an energy product for resale, usually steam, hot water or electricity or a combination thereof.
- (109) "Water table" means the upper surface of the zone of saturation in ground waters in which the hydrostatic pressure is equal to the atmospheric pressure.
- (110) "Working face" means that area within a landfill which is actively receiving solid waste for compaction and cover.
- (111) "Yard waste" means decomposable waste materials generated by yard and lawn care and includes leaves, grass trimmings, brush, wood chips and shrub and tree trimmings. Yard waste shall not include roots or stumps that exceed six inches in diameter. (Note: Yard wastes are also vegetative waste; however, the terms are not interchangeable because vegetative wastes may include wastes that are not yard wastes.)
- (112) "Yard waste compost" means a stabilized organic product produced from yard waste by a controlled aerobic decomposition process in such a manner that the product can be handled, stored and/or applied to the land so that it does not pose a present or potential hazard to human health or to the environment.

(113) "Yard waste composting" means the controlled aerobic decomposition process of yard waste by which yard waste compost is produced.

(114) "Yard waste composting facility" means an engineered facility for composting of yard waste which is so located, designed, constructed and operated to isolate, process and manage the yard waste and yard waste compost so that it does not pose a present or potential hazard to human health or the environment.

(Ord. 99-06. Passed 5-19-99.)

1080.03 ADMINISTRATION AND ENFORCEMENT; RIGHT OF ENTRY.

(a) Administrative Authority. The Director of Solid Waste Management, or his or her agent, shall be responsible for the administration and enforcement of this chapter.

(b) Right of Entry. The Director, or his or her agent, may, with proper identification, enter, at reasonable times, upon public or private property for the purposes of inspecting and investigating conditions relating to the enforcement of this chapter, but only after obtaining consent of the owner or occupant of the private property to be inspected, which owner or occupant has the authority, under law, to authorize such entry and inspection.

(c) Inspection Warrant.

(1) If such consent is not obtained, for any reason, including the inability to contact or locate the person with the authority to authorize such inspection, the Director shall obtain, from a County magistrate or judge, a warrant authorizing such entry, inspection or investigation upon such private property upon a showing of probable cause, supported by an affidavit, particularly describing the place, thing or person to be inspected or investigated, and the purpose for which the inspection or investigation is to be made. Probable cause shall be deemed to exist either if reasonable administrative standards for conducting such inspection or investigation are satisfied, with respect to the particular place, thing or person, or if there exists probable cause to believe that there is a condition, object, activity or circumstance which legally justifies such inspection or investigation. The supporting affidavit shall contain either a statement that consent to inspect or investigate has been sought and refused or not received or a description of the circumstances reasonably justifying the failure to seek such consent in order to effectively enforce this chapter.

(2) An inspection warrant shall be effective for the time specified therein, not to exceed ten days, unless extended or renewed by the judicial officer who signed and issued the original warrant, upon a showing that such extension or renewal is in the public interest. Such warrant shall be executed and returned to the judicial officer by whom it was issued within the time specified in the warrant or within the extended or renewed time. After the expiration of such time, the warrant, unless executed, shall be void. An inspection pursuant to such warrant may not be made in the absence of the owner, custodian or possessor of the particular place, thing or person unless specifically authorized by the judicial officer upon a showing that such authority is reasonably necessary to effectuate the purpose of this chapter. An inspection pursuant to this warrant shall not be made by means of forcible entry, except that the judicial officer may expressly authorize a forcible entry where facts are shown sufficient to create a reasonable suspicion of a violation of any of the provisions of this chapter which, if such violation existed, would be an immediate threat to health or safety, or where facts are shown establishing that reasonable attempts to serve a previous warrant have been unsuccessful. In the case of inspection of a dwelling, prior consent must be sought and refused unless the issuing judicial officer finds that failure to seek consent is justified and that there is a reasonable suspicion of an immediate threat to public health or safety.

(d) Compliance With Inspection Warrants. No person shall willfully refuse to permit an inspection lawfully authorized by a warrant issued pursuant to this chapter. (Ord. 99-06. Passed 5-19-99.)

1080.04 GENERAL RESTRICTIONS AND SPECIFICALLY PROHIBITED ACTS.

(a) General Restrictions. No person may engage in the removal, storage, disposal or treatment of solid waste in such a manner as to create a public nuisance, pollute the air, cause a discharge of pollutants to the surface and/or ground water of this County or otherwise impair the quality of the environment or create a hazard to the public safety, health or well-being.

(b) Specifically Prohibited Acts.

- (1) No solid waste management facility shall be constructed or operated within Loudoun County without a valid permit issued under this chapter. No person shall cause, suffer, allow or permit the construction or operation of an unpermitted solid waste management facility on his or her property.
 - (2) Liquid wastes and wastes containing free liquids may be disposed of only at a solid waste management facility that has been specifically authorized by the Director and the Virginia Department of Environmental Quality to accept such waste.
 - (3) Solid waste may not be burned at a solid waste management facility except as permitted by the Director, the Virginia Air Pollution Control Board, regulations for the control and abatement of air pollution, and the Loudoun County Department of Fire, Rescue and Emergency Services.
 - (4) No person shall dispose of solid waste in open dumps.
 - (5) Open dumping is prohibited in Loudoun County. No person shall cause, suffer, allow or permit open dumping on his or her property.
 - (6) Infectious waste shall not be accepted at any solid waste management facility.
 - (7) Scavenging or salvaging is prohibited at any County-owned solid waste management facility, except as authorized by the Director.
- (Ord. 99-06. Passed 5-19-99.)

1080.05 PERMITS.

(a) Required. A permit is required for all solid waste management facilities. No person shall construct and/or operate a solid waste management facility without a valid permit issued by the Director. Permits are required for any new and existing facility or any previously permitted facility that substantially modifies its approved operation and maintenance plan. Facilities must satisfy the design and operational criteria outlined in the Facilities Standards Manual and Sections 1080.16 through 1080.25. Permits shall be issued for no longer than five years for solid waste management facilities. All permits are subject to amendment and revocation as provided in this chapter. Open dumps are prohibited in the County.

(b) Exemptions. The following activities are exempt from permit requirements, as provided in this section, but may be subject to other provisions of this chapter.

- (1) Agricultural land clearing. Solid waste management practices that involve only the placing of stumps and other land clearing debris from agricultural or forestal activities at the site of the clearing that do not receive waste from off-site and that do not create an open dump, hazard or public nuisance are exempt from all requirements of this chapter.
- (2) Recycling facilities. No permit shall be required pursuant to this chapter for recycling or for temporary storage incidental to recycling. A CTO is required for recycling facilities. Anyone proposing to operate such a facility shall contact the Director for a written exemption based on the provisions of this section.
- (3) Land clearing of arboreal waste for land development. Any person who removes arboreal waste from land clearing operations for land development and processes the waste through mulching, chipping, or grinding is exempt from all requirements of this chapter, provided that such material is deposited, placed, and processed on the same property from which the materials were cleared; is removed from the property within six months of placement of the waste; and does not create an open dump, hazard or public nuisance.
- (4) Yard waste. Owners or other persons authorized by the owner of real property who receive only yard waste or processed vegetative waste generated off-site for the purpose of producing compost on said property shall be exempt from all other provisions of this chapter as applied to the composting activity, provided that:
 - A. Not more than 500 cubic yards of yard waste generated off-site is received at the owner's said property in any consecutive twelve-month period;
 - B. No compensation is received, either directly or indirectly, by the owner or other persons authorized by the owner of said property from parties providing yard waste generated off said property; and
 - C. The activity poses no nuisance or present or potential threat to human health or the environment.

(c) Application for Permits. Every person desiring a permit under this chapter shall submit a written application to the Director in the format specified by the Director. An application for a permit shall not constitute authorization to operate pending action on the request. The application shall provide sufficient information to address the requirements of this chapter. When co-processed with State permit applications, complete copies of the Part A and Part B application to the Virginia Department of Environmental Quality shall be provided to the County. Copies of the construction contract documents or such documents as are required by the permit by rule provision in 9 VAC 20-80 (solid waste management), and 9 VAC 20-101 (vegetative waste management and yard waste composting) shall be provided to the County when they are submitted to the State. In addition, the Director may require reasonable additional information as deemed necessary due to site conditions and to determine site suitability (i.e., additional geotechnical borings, wells, etc.)

(d) Conformance With Zoning Ordinance. An application for a permit under this chapter shall be submitted contemporaneously with a letter of compliance with the Zoning Ordinance from the Zoning Administrator, or with copies of the application for a special exception permit if required by the Zoning Ordinance. Prior to acting upon an application for a solid waste management facility permit, the Director shall require the applicant to furnish evidence from the Department of Building and Development that the property and the proposed use are in compliance with the land use requirements of the County.

(e) Waivers of Technical Requirements. Upon petition to the Director, the applicant may request of the Board a waiver of any technical application submission requirement, provided that the Director finds that such requirement(s) are not necessary to demonstrate compliance with the intent of this chapter. Upon petition to the Director, the applicant for any existing facility that has been deemed in compliance with this chapter may request of the Board a waiver of any siting or operational regulation required by this chapter, provided that such waiver will not place a solid waste management facility in noncompliance with any State or Federal requirements and only upon a finding that such waiver will not result in a negative impact on the environment or cause a public nuisance.

(f) Public Participation Process Required. Before any solid waste management facility permit required by this chapter is issued, the Director will advertise the intent to issue said permit for two successive weeks in a newspaper of general circulation in the County in which the public will be invited to submit written comment on the proposed permit regarding any aspect of alleged non-conformance contained in the proposed permit. A draft of the proposed permit will be kept at the Loudoun County Office of Solid Waste Management for review by the public during regular business hours. Written comment from the public will be accepted for thirty calendar days following the first advertisement of intent to issue. All written comments which are timely submitted will be reviewed by the Director. No permit shall be issued prior to the completion of the public participation process.

(g) Temporary Permit. An applicant whose permit and/or CTO has expired or who was not previously required to obtain a permit and/or CTO, and who has been in operation for at least one calendar year immediately prior to the submission of the application in full compliance with all applicable requirements of this chapter, may apply to the Director for a temporary permit. An application for a temporary permit shall not constitute authorization to operate pending action on the request. Any such application shall be presented to the Board of Supervisors for approval.

The Board of Supervisors shall determine the duration of the temporary permit which shall in no case exceed six months, and which shall not be subject to renewal or extension. The temporary permit shall be contingent upon the applicant's continuing adherence to a permitting compliance schedule established in advance by the Director, and provided that the operation of the facility does not pose a present or potential hazard to public health or the environment. If at any time the Director finds that the applicant has failed to adhere to the compliance schedule or that continued operation of the facility constitutes a present or potential hazard to public health or the environment, the temporary permit shall be withdrawn and the facility shall cease operations. (Ord. 99-06. Passed 5-19-99.)

(h) Limits on Facility Permits. No permit shall be issued by the Director to any facility to process, manage, sort, store or transfer more than 600 tons of municipal solid waste (MSW) per day. The aggregate permitted tonnage at all facilities, excluding the County Landfill, shall not exceed 750 tons of municipal solid waste per day. For the purposes of this subsection, tons per day is defined as the total tonnage of MSW accepted by the facility in any consecutive seven-day period of operation, divided by seven. The County Landfill is exempt from this subsection. This subsection shall not apply to consumer separated recyclables, vegetative waste or construction waste. All permits issued after the date of adoption of this subsection shall conform to this subsection. (Ord. 00-10. Passed 10-16-00.)

1080.06 FEES.

All solid waste management facilities shall be subject to the following fees:

- (a) Application Fees. Each application shall be accompanied by a fee of twenty-five (\$25.00) per proposed project acre. This fee will be waived for County-owned and/or operated facilities.
- (b) Public Participation Fees. A public participation fee as listed in the following chart shall be paid prior to commencement of the public participation process.
- (c) Permit Fees. Upon approval of the application and all construction and operating plans for solid waste management facilities, and prior to the initiation of the public participation process, a permit fee must be paid. The fee will be assessed according to the following Solid Waste Facility Fee Schedule.
- (d) CTO Fees. An annual CTO fee, as provided in the fee schedule below, must be paid annually, commencing one year after the date of the initial CTO issuance, to offset the cost of site inspections by the County staff. This fee is waived for County-owned and/or operated facilities.

SOLID WASTE FACILITY FEE SCHEDULE

	Recycling		MRF or Transfer Station	Vegetative Waste Management Facilities	Landfill	Incinerators
	<1ac.	≥1ac.				
Application Fees	\$25.00/per proposed project acre					
Public Process	<u>\$1,000/per public hearing; \$1,000/draft permit process</u>					
Permit Required	No	No	Yes	Yes	Yes	Yes
Permit Fees	N/A	N/A	\$3,000	\$4,500	\$10,000	\$10,000
CTO Fees	N/A	\$1,000	\$2,500	\$3,500	\$2,500	\$1,000

(Ord. 99-06. Passed 5-19-99.)

1080.07 SURETY AND INSURANCE REQUIREMENTS.

(a) Initial Construction Surety. Subsequent to the approval of a permit and prior to commencing the construction of the solid waste management facility, the permit holder shall place with the County a construction and erosion control bond or other instrument of the kind and amount specified in the Facilities Standards Manual.

(b) Environmental Impairment Surety. Subsequent to the approval of a permit and prior to issuance of the Certificate to Operate (CTO), the permit holder shall provide the County with a cash escrow to be held in the Environmental Impairment Trust Fund, or a corporate surety bond satisfactory to the Board as to the form, amount and surety, to ensure that when the facility is closed or abandoned, the costs of closure, long-term maintenance of the environmental protection systems and any remedial measures that might be required are covered. The amount of the cash escrow or bond shall be prepared and submitted by a professional engineer certified in the State of Virginia for the owner/operator, and is subject to County approval. Any and all forms of surety shall be at least equivalent to 100 percent of the approved estimate of the cost of closure, long-term maintenance of the environmental protection systems and any remedial measures that might be required. A reasonable allowance for estimated administrative costs and inflation should also be included.

The amount of closure/post-closure costs shall be reviewed and recertified as adequate in accordance with this chapter on an annual basis as part of issuance of a CTO. The amount of the environmental impairment surety required shall be not less than the annually adjusted estimate of closure/post-closure costs. This surety will remain in effect for a minimum of ten years after closure or as otherwise specifically required in this chapter and shall be released upon application of the solid waste management facility operator only when the Director determines, through test and analysis, that there is no appreciable potential hazards to public safety or the environment. The requirement for a surety is not applicable for County-owned and/or operated facilities.

(c) Management of Escrow Accounts. The Department of Financial Services, through its Division of Accounting and Control, shall account for the Environmental Impairment Trust Fund separately from all other funds and, along with the County Treasurer, shall maintain records of individual cash escrows as to principal and accumulated interest. Upon the written request of the Director, the Department of Financial Services, through its Division of Accounting and Control, shall be authorized to disburse or transfer funds to the General Fund or to the General Capital Projects Fund, as appropriate, for the purposes stated herein, or to release funds, either in full or the residual thereof, as stated herein, the sum of which is equal to, but not in excess of, the cash escrows deposited to the Fund, including interest accrued upon the amount so released, less an administrative fee equal to five percent of the total interest accrued on the Fund for a particular facility. Any disbursements, transfers or releases to be made will be in accordance with County policies and will be expended or released on order of the County Administrator. The County Administrator is authorized, pursuant to Section 15.1-117(11) of the 1950 Code of Virginia, as amended, and pursuant to a resolution adopted by the Board of Supervisors on July 1, 1963, as amended, to pay all normal and routine claims when presented, for which sufficient funds are available.

(d) Public Liability Insurance. The operator of any solid waste management facility shall provide, before commencing operation of the facility, evidence satisfactory to the Director of adequate public liability insurance covering the operation of the facility and naming the County as an additional insured. This provision is waived for publicly-operated facilities. (Ord. 99-06. Passed 5-19-99.)

1080.08 ISSUANCE OR DENIAL OF PERMITS.

Prior to acting upon an application for a solid waste management facility permit, the Director shall refer the application, along with all other pertinent information, to the County Department of Building and Development, the Health Director and other appropriate referral agencies for their reports and recommendations.

Upon a determination of the Director that the proposed solid waste management facility meets the requirements of applicable County ordinances and regulations, the Director will issue a permit for the construction of the facility. The Director may attach conditions to a permit when necessary to protect the public health or the environment. Permits shall be nontransferable without prior approval of the Director. The Director shall deny the permit if it is determined that the facility as designed cannot meet applicable County requirements. The Director shall notify the applicant, in writing, of the decision to deny the permit and shall specify therein the reasons for denial. Decisions of the Director under this section shall be based upon:

- (a) The application and supporting documentation;
 - (b) Additional information furnished by the applicant at the request of the Director; and
 - (c) Information furnished by County staff, by consultants employed by the County or by any local, State or Federal agency at the request of the Director.
- (Ord. 99-06. Passed 5-19-99.)

1080.09 CERTIFICATE TO OPERATE REQUIRED.

Solid waste management facilities shall not commence operations until a CTO is issued by the Director. The CTO shall be administered in conformance with State regulations 9 VAC 20-80 and 9 VAC 20-101, this chapter, the Facilities Standards Manual and the approved operations and maintenance plan. The CTO is in addition to the required permit and may be suspended, amended or revoked pursuant to the provisions of this chapter. A CTO will be granted within thirty days after the facility is constructed and after copies of all local, State and Federal clearances or permits have been received by the Director. The CTO must be renewed annually.

(Ord. 99-06. Passed 5-19-99.)

1080.10 COMPLIANCE WITH PERMITS, CERTIFICATES TO OPERATE, ETC.

Operation of the solid waste management facility shall be in strict conformity with the permit, the CTO, the approved operation and maintenance plan, the Facilities Standards Manual and all other applicable County, State and Federal regulations. Commencement of active operations shall not occur prior to receipt of a CTO issued by the Director.

(Ord. 99-06. Passed 5-19-99.)

1080.11 INSPECTIONS.

All County regulatory departments shall be allowed access to any site or facility at any reasonable time to inspect, investigate, evaluate, conduct tests or take samples for testing as is deemed reasonably necessary to ensure compliance with the provisions of the permit and applicable County, State and Federal regulations. At a minimum, inspections shall be conducted quarterly by the Director, and a written report of inspection shall be provided to the operator.

(Ord. 99-06. Passed 5-19-99.)

1080.12 AMENDMENTS OR ATTACHMENT OF ADDITIONAL CONDITIONS TO PERMITS.

The Director may amend or attach additional conditions to a permit when:

- (a) The testing and inspection process has found substances that are defined by the EPA or other County, State or Federal regulatory agencies as indicators of potential pollution that will cause adverse effects to the air, land, surface water or ground water; and
- (b) An investigation has shown the need for additional equipment, construction procedures and/or testing to ensure the protection of the public health and/or the environment from adverse effects.

(Ord. 99-06. Passed 5-19-99.)

1080.13 COMPLIANCE ORDERS.

Whenever the Director determines that any permit holder is not in compliance with any approved construction plan and/or operational plan, or that the permit holder is in violation of any applicable County regulation, the Director may issue an order requiring immediate compliance or compliance within a specified time period.

(Ord. 99-06. Passed 5-19-99.)

1080.14 REVOCATION OF PERMITS AND/OR CERTIFICATES TO OPERATE; STOP-WORK ORDERS; REMEDIAL MEASURES.

(a) The Director may revoke a permit and/or a CTO, issue a stop-work order or require immediate remedial measures if any of the following conditions exists:

- (1) The permit holder violates any section of this chapter so as to pose a substantial present or potential hazard to human health or the environment, or the violation is representative of a pattern of serious or repeated violations which, in the opinion of the Director, demonstrate the permittee's disregard for or inability to comply with the provisions of this chapter.
- (2) The solid waste management facility is maintained or operated in such a manner so as to pose a substantial present or potential hazard to human health or the environment.
- (3) Leachate or residues from the facility pose a threat of contamination or pollution of the air, surface water or ground water in a manner resulting in a substantial present or potential hazard to human health or the environment.
- (4) The permit holder abandons, transfers ownership of, leases or ceases to operate the solid waste facility.
- (5) The permit holder fails to maintain acceptable evidence of financial responsibility as required by local or State regulation.
- (6) The Director has issued a compliance order and the permit holder has failed to comply within the specified time period.
- (7) An unpermitted facility is in operation in the County.
- (8) A permitted facility that has not received a CTO is in operation.
- (9) The manner or scope of operation significantly changes from the original permit conditions described by the permit or operations and maintenance plan.
- (10) The solid waste facility operator fails to follow the permitted operation and maintenance plans.

(b) Once the Director has issued a revocation or stop-work order pursuant to subsection (a) hereof, the operator will immediately stop operation and take appropriate actions to secure the site and shall not reinitiate operations until the Director rescinds the stop work order or reinstates the CTO in writing. The reinitiation clearance will not be unreasonably withheld by the Director, provided that the operator/applicant has taken appropriate corrective action or favorable action has been completed on an appeal.
(Ord. 99-06. Passed 5-19-99.)

1080.15 APPEALS.

(a) An applicant or an operator may appeal the denial of a permit or a CTO, a revocation, a stop-work order or required remedial measures, in writing, with supporting justification for the appeal, to the Director. Within seven days of the receipt of the appeal, the Director may vacate or reinstate the permit or convene a review board composed of three impartial professionals with requisite qualifications in solid waste facility management (one selected by the County, one selected by the operator/applicant and one selected by mutual agreement) to consider the appeal and submit a decision based on consent of two-thirds of its members to the Director within fourteen days of receipt of the appeal. The review board member selected by mutual agreement shall serve as chair. All documentation will be considered and one or more meetings may be required with interested parties. At the completion of the review, the Director will notify the operator/applicant, in writing, within three days, as to the decision of the review board and disposition of the case. All costs and fees for this review board will be borne by the operator/applicant. If the Director disagrees with the decision of the review board, a synopsis of the differing opinions will be immediately prepared for submission to the Board of Supervisors at its next scheduled business meeting. This appeal mechanism may also be used by the applicant during the design review process prior to the issuance of a permit if irreconcilable differences develop between the technical staff and the applicant.

(b) If the operator feels that a decision rendered by the review board under subsection (a) hereof is incorrect, an appeal may be taken directly to the Board of Supervisors.
(Ord. 99-06. Passed 5-19-99.)

1080.16 GENERAL CONSTRUCTION AND OPERATION REQUIREMENTS.

(a) The design, construction, operation and closure of all solid waste management facilities shall be conducted in strict compliance with all regulations of the Virginia Department of Environmental Quality, the Virginia Water Control Board, the Virginia Air Pollution Control Board, these Codified Ordinances, including the Facilities Standards Manual, and applicable Federal regulations.

(b) Solid waste management facilities, including vegetative waste management facilities, shall not be located in critical environmental areas (e.g. the floodplain, as defined in Section 740.3(4) of the Zoning Ordinance), areas of general slope in excess of fifteen percent, major groundwater recharge areas, limestone conglomerate areas and wetlands. Solid waste management facilities, with the exception of vegetative waste management facilities, are subject to siting criteria as defined by 9 VAC 20-80-250. Vegetative waste management facilities are subject to siting criteria as defined in 9 VAC 20-101-120.
(Ord. 99-06. Passed 5-19-99.)

(c) Solid waste shall not be deposited closer than 300 feet to any residential property line and 200 feet to any commercial or industrial property line. The setback shall apply to waste handled both inside structures and outside structures. The Board of Supervisors may reduce this setback distance of commercial or industrial property lines if the owner or operator successfully shows that a nuisance will not be created owing to the operation of such facility, and provided that the operation of said facility is conducted wholly within an enclosed building and that said facility does not handle municipal solid waste. This subsection shall not apply to scales offices or other structures that are not used for the purposes of depositing, separating or loading solid waste. All requests for a reduction in setback requirements shall be advertised for a public hearing in a newspaper of general circulation in the County. This public hearing can be held concurrently with a public hearing to consider a request for a rezoning, a special exception or a waiver of selected technical standards in this chapter for the same use on the same property. The waiver provision of Section 1080.05(e) shall not apply to this section.
(Ord. 00-12. Passed 11-20-00.)

(d) All solid waste management areas shall be adequately screened and/or buffered within the required setbacks from all adjacent properties and all streets. Buffering may include trees or other natural screening or approved man-made structures.

(e) The operational plan, construction plan and operational and maintenance plan shall be developed in accordance with the Facilities Standards Manual, this section and Sections 1080.16 through 1080.25 and implemented to specifically monitor and control the following environmental and public health concerns:

- (1) Surface water contamination;
- (2) Ground water contamination;
- (3) Wetlands degradation;
- (4) Methane gas migration;
- (5) Noise;
- (6) Odor;
- (7) Dust;
- (8) Smoke;
- (9) Insect and rodent vectors;
- (10) Hours and days of operations; and
- (11) Other operational criteria as identified by the Director.

(f) All solid waste facilities shall be operated by a licensed waste management facility operator as defined by the Virginia Department of Professional and Occupational Regulations. The operator shall possess at least a Class I license.

(g) All applications for solid waste facility permits shall include a disclosure statement on a form approved by and obtained from the Director. The disclosure statements shall include the following:

- (1) The name, address and business address(es) of the owner(s), operator and all real parties in interest.

- (2) Identification of any and all compliance actions initiated against the applicant by any local, State or Federal solid waste regulatory agency within the last ten years, which are either pending or which resulted in a finding of violation or an entry of a consent agreement for violation of any law, regulation or requirement.
- (3) An affirmation by the owner of the property upon which the business is to be conducted that the applicant has the owner's permission to operate a solid waste management facility on said property.

- (4) A disclosure form affidavit in which the applicant certifies, under oath, that the information contained in the disclosure form is true accurate and complete.

The disclosure form shall be reviewed quarterly by the owner or operator of the facility and revised, if needed, to maintain current information.

(Ord. 99-06. Passed 5-19-99.)

1080.17 DESIGN AND PERFORMANCE STANDARDS.

A comprehensive set of construction plans and specifications shall be prepared and certified by a professional engineer licensed to practice in Virginia, which certifies that the minimum standards of this chapter are met. In addition, these plans and specifications must meet the requirements of 9 VAC 20-80 or 9 VAC 20-101. The following subsections emphasize details that must be included in the design:

- (a) Site-Analysis Information. The following information shall be submitted to support any application for a solid waste management facility, unless otherwise specifically noted in this chapter:
- (1) An environmental inventory shall be provided which includes, but is not limited to, the following items:
 - A. A map, drawn to 1:2,400 scale (one inch equals 200 feet) on a sheet twenty-four inches by thirty-six inches, containing the following details located to National Map Accuracy:
 1. Existing topography, with not greater than five-foot intervals;
 2. Planimetric detail, including swamps, marshes, ponds, wooded areas, buildings, roads, fence lines, utility structures, etc.;
 3. The Virginia Coordinate Grid System, at 1,000-foot intervals, a location map and a north arrow.
 - B. A boundary survey and proposed operational limits;
 - C. A soils overlay map;
 - D. Delineation of critical environmental areas and other areas designated in Section 1080.16.
 - E. The location of all structures, pollution sources and wells (existing and proposed), known pollution sources and natural water sources on the site and within 2,000 feet outside the site boundary. An aerial photo is acceptable with proper labeling of structures.
 - F. Monthly prevailing wind direction as obtained from historical records for at least a twelve-month period.
 - (2) A report detailing investigations of hydrogeological and geotechnical conditions shall be submitted in accordance with 9 VAC 20-80, Part V, or as otherwise specifically required in this chapter.
- (b) Construction Plans; Site Plans. A comprehensive plan detailing the design of the facility shall be submitted. Such plan shall meet all requirements of 9 VAC 20-80 or 9 VAC 20-101 and this chapter. Where a site plan for a proposed facility is required to be submitted under the Subdivision Regulations, such plan shall meet

all of the requirements of such Regulations. In addition, plans shall meet the following requirements:

- (1) The scale of this construction plan shall be as follows:
 - A. For facility sites up to ten acres in size, one inch equals fifty feet;
 - B. For facilities greater than ten to 200 acres, one inch equals 100 feet;
 - C. For facilities greater than 200 acres, one inch equals 200 feet.

The Director may approve other scales or direct that additional scales be used for projects with special needs.
- (2) Plans may be prepared and submitted for approval by phases, with a maximum of five years being incorporated in each phase.
- (3) Survey monuments and benchmarks shall be constructed on-site and maintained unless the entire facility operation is housed within a structure.
- (4) All fencing and barriers to be constructed at a facility shall be shown on the plans in full elevation and shall be fully dimensioned, and the type of construction materials shall be identified and specified. Fencing with

controlled access may be required around the operational area, as determined by the Director.

- (5) All utilities to be installed at a facility shall be shown in plan, section and profile, where applicable. The design shall initiate at a point of service connection, on-site or off-site, and be shown complete to the point of usage. Written assurances and easements from the provider that utility connections are available must be submitted. If community waste disposal and water facilities are not supplied, permits for all on-site waste disposal and water supplies are required.
- (6) Roads and access shall be provided as follows:
 - A. Off-site access roads to the entrance of the solid waste management facility shall be a State maintained, paved road with a minimum pavement width of twenty feet.
 - B. An on-site, all-weather road negotiable by loaded solid waste transport vehicles shall be provided from the entrance gate to the unloading area on-site.
 - C. The unloading area shall be of adequate size and design to facilitate the rapid unloading of solid waste from collection vehicles, with minimum delay and confusion. A vehicle stacking area shall be provided on-site to prevent build-up on main roads.
 - D. Provision shall be made to minimize the tracking of debris or other material onto any public road and to ensure immediate clean-up of debris, mud, dirt or other material on roads in the vicinity of the site access.
- (7) A firebreak of a minimum of fifty feet shall be maintained completely around the waste footprint, including stockpiled or decomposing material.

(c) Groundwater Monitoring Programs. Where required, a groundwater monitoring program consistent with the technical requirements of 9 VAC 20-80, Part V, shall be submitted.

(d) Surface Water Monitoring Programs.

- (1) All solid waste management facilities, except those in which solid waste is stored, deposited, placed, processed or otherwise managed wholly within a closed building and no discharge is permitted other than to an approved sewage treatment system, require a surface water monitoring program as described in this subsection. Surface water sampling sites shall be located according to the following or as otherwise approved by the Director:
 - A. Upstream of the solid waste management facility on any stream, or catch out device;
 - B. Downstream of the solid waste management area on any stream;
 - C. From within any storm water management pond, or similar drainage device serving as a leachate control device for the facility; or
 - D. At the outfall of any storm water management, sediment control or other drainage device serving the site, or other locations as determined by the Director.

- (2) Surface water samples shall be taken prior to acceptance of any waste and once every three months thereafter. The minimum parameters to be monitored shall be COD, BOD, TOC, TSS, pH, NH₅N, NO₃N, total phosphates and RCRA metals included as priority pollutants. Methods proposed for sampling and analysis shall be listed as acceptable methods for such parameters in the Virginia Solid Waste Management Regulations at the time of each monitoring event. This monitoring program may be conducted between the time of application for the zoning clearance and the beginning of waste storage and/or processing operations. The initial CTO will not be issued by the Director until background information is submitted and accepted. Subsequent CTO renewals will not be issued unless monitoring programs are current and quarterly reports have been received. Surface water monitoring shall be conducted within forty-five days of report submittal to the Director. Reports of quarterly surface water monitoring shall be provided to the Director by October 1, January 1, April 1, and July 1 for the preceding quarter.
- (3) Surface water sampling sites shall be accessible by utility vehicles for sampling and monitoring.
(Ord. 99-06. Passed 5-19-99.)
- (e) Leachate Management Plans. A plan to manage leachate in accordance with 9 VAC 20-80 or 9 VAC 20-101 shall be included. Documentation, including prediction of qualities produced, proper treatment and disposal of all leachate and other effluents collected, will be provided to the Director by the applicant. Such documentation shall include a contractual agreement with the operators of an approved treatment facility and a contractual arrangement for the transporting of leachate to such site.
- (f) Comprehensive Operational and Management Plans. A comprehensive operational and management plan in accordance with 9 VAC 20-80 or 9 VAC 20-101 shall be included.
- (g) Comprehensive Erosion Control and Storm Water Management Plans. An erosion control and storm water management plan in accordance with these Codified Ordinances and this chapter shall be submitted and shall include provisions for the following:
 - (1) Erosion control. Temporary erosion control, including, but not limited to, diversion ditches, embankments, channels, vegetation growth, straw bales, grade stabilization, etc., as required by Chapter 1220 of these Codified Ordinances, shall be undertaken as needed to minimize erosion and deposition off-site. A grading permit from the Department of Building and Development is required before any land disturbing activity commences.
 - (2) Storm water management. Provisions shall be made to manage surface water at the solid waste management facility. Calculations indicating water quantities shall be calculated based on a twenty-four -hour rainfall in inches to

be expected once in twenty-five years. Design construction plans shall show the following:

- A. All ditches and surface drainage facilities, fully dimensioned, indicating gradient and elevations.
 - B. Diversion ditches constructed, fully dimensioned, indicating length, gradient and cross-sectional configuration. Side slopes of diversion ditches shall not be greater than two horizontal to one vertical or fifty percent.
- (Ord. 99-06. Passed 5-19-99.)

1080.18 SITE OPERATIONS AND OPERATION PLANS.

Site operations and the operation plan shall include provision for the following:

- (a) Where operational problems occur, or geologic or hydrologic conditions warrant, the Director may require the performance of additional tests and submission of additional information to ensure continued disposal site suitability and operation plan viability.
- (b) Daily operational records shall be maintained by the operator that show the type and general origin of incoming waste or recyclables, the destination and amount of waste transshipped or buried, and the amount and destination of material recycled by material type. Summary waste handling reports shall be provided to the Director by the operator on a quarterly basis for October through December; January through March; April through June; and July through September, by no later than January 31, April 30, July 31, and October 31, for the preceding quarter.
- (c) Names, addresses and telephone numbers of all authorized persons who are to be placed in responsible charge of operations of the solid waste management facility will be provided and kept updated upon any change of key personnel. At least one such person shall be on duty at all times during hours of operation. At all other times, the site will be secured so as to prohibit access by unauthorized persons.
- (d) At the entrance to the site, a sign will be erected that states the name of the facility, a schedule of days and hours of operation and an emergency number accessible twenty-four hours a day. No solid waste will be accepted outside the posted hours of operation. Facility operations are authorized only during the hours approved in the permit.
- (e) Adequate sanitary and shelter facilities, Health Department approved, shall be provided on-site for landfill personnel.
- (f) Sufficient equipment and adequate personnel shall be available on-site at all times of operation in order to comply with the approved operation plan and the provisions of this chapter.
- (g) Equipment provided for operation of the facility shall be in operable condition and adequate in size and performance capability to continuously conduct the operations in accordance with this chapter.

- (h) Standby equipment shall be reasonably available in the event of major equipment breakdown.
- (i) An attendant shall direct vehicles to the unloading area, or clearly marked signs shall be prominently located directing vehicles to the unloading area.
- (j) Litter control fences shall be located in the immediate operating area, approximately fifty to seventy-five feet downwind from any area where waste can be blown by the wind. The operator shall keep the entire landfill adequately policed and free of litter. Litter shall be collected routinely at no greater than weekly intervals from all areas other than the unloading area, such as from fences, roadways and treeline barriers, and such litter shall be disposed of according to this chapter.
- (k) No salvaging shall be permitted at the facility except as provided in the operation plan. Any salvaging operations approved by the Director will be strictly supervised and conducted in accordance with the operation plan.
- (l) The applicant must provide certification from the Fire Marshal's office that fire-fighting resources are adequate to protect the site and its contents.
- (m) Vectors and rodents shall be effectively controlled so as not to constitute nuisances or hazards. If, in the opinion of the Director of the Health Department, a vector infestation occurs, the Director may order the facility closed and the rodents or other vectors controlled at the expense of the owner or operator of the facility.
- (n) To control dust and mud problems off-site, the following measures shall be implemented:
 - (1) Paving of access roads leading to the unloading area;
 - (2) Spraying clean water, as needed, on roadways;
 - (3) Providing a wash rack for vehicles;
 - (4) Applying water or other material approved by the Director to travelways or work areas to control dust; and
 - (5) Other measures approved by the Director as needed.(Ord. 99-06. Passed 5-19-99.)

1080.19 CLOSURE.

(a) All solid waste management facilities are subject to closure requirements provided in this section. The owner or operator shall close a facility in a manner that minimizes the need for further maintenance. The owner or operator shall control, minimize or eliminate, to the extent necessary to protect human health and the environment and to prevent nuisances, the post-closure escape of uncontrolled leachate, surface-water runoff, waste decomposition products to the ground water and surface water and decomposition gas migration.

(b) All solid waste management facilities in operation as of the date of adoption of this chapter shall fully comply with this chapter or shall immediately proceed to close in accordance with the following requirements.

- (1) The owner/operator shall submit a closure plan which meets the requirements of 9 VAC 20-80 or 9 VAC 20-101;
- (2) Closure construction operations shall be completed within 180 days of the adoption of this chapter; and
- (3) Post-closure monitoring shall be conducted in accordance with 9 VAC 20-80.

(c) All solid waste management facilities shall have a closure plan which meets all requirements of 9 VAC 20-80 or 9 VAC 20-101.

(d) The post-closure period shall be determined by the Director.

(e) The owner/operator shall complete closure activities in accordance with the approved closure plan and within six months after receiving the final wastes.

(f) The owner operator shall be responsible for post-closure monitoring as required.
(Ord. 99-06. Passed 5-19-99.)

1080.20 RECYCLING FACILITIES.

(a) General Requirements. All recycling facilities of one acre or more are subject to the general requirements governing solid waste management facilities provided in this chapter and as specified herein. A permit, as described in Section 1080.05, will not be required. However, a CTO shall be required prior to facility operation.

(b) Specific Design and Performance Standards. Proposals for recycling facilities shall contain the following:

- (1) Site-analysis information. An environmental inventory as provided for in Section 1080.17(a)(1) shall be required. A Type-II Geotechnical Report will be required for any proposed structures. Additional Type-II reports may be required by the Director.
- (2) Construction plans. The construction plan will ensure the proper collection, treatment and disposal of any leachate or other effluents generated. Documentation for these procedures will be provided to the Director and may include a contractual agreement with the operators of a treatment facility off-site and a contractual arrangement for the transporting of leachate or effluents to such site.
- (3) Ground water monitoring plans, depending on the proposed use and/or site and at the discretion of the Director.
- (4) A surface water monitoring plan if the site is not controlled as defined in this chapter.
- (5) A leachate or liquid effluent control plan to account for seepage from temporarily stored waste, excess liquid from air pollution or dust control or other liquids.

- (6) An erosion control and storm water management plan, as provided for in Chapter 1220 of these Codified Ordinances.
- (7) An operation and maintenance plan.
- (8) A waste and recovery materials stockpile plan, which shall provide design and maintenance criteria for controlling effluents.

(c) Operational Standards. The operations and maintenance plan shall include necessary provisions to ensure compliance with the following standards:

- (1) The recycling facility will be operated and maintained in accordance with approved construction plans and specifications and the operations manual.
- (2) Before commencing operation of a recycling facility, the owner/operator shall have completed site and structure preparation in accordance with an approved comprehensive construction plan and plan of operation and shall have been issued a CTO.
- (3) Surface water monitoring consistent with Section 1080.17(d) may be required by the Director.
- (4) Burning, storage or burial of solid waste is prohibited at the recycling facility.
- (5) Recycled materials collected at the facility will be transferred from the facility as described in the approved operations and maintenance plan or more frequently as required by the Director or demands on the facility.
- (6) Residual materials shall be transported to an approved disposal facility.

(d) Closure. All recycling facilities are subject to closure requirements provided in Section 1080.19 and as follows:

- (1) All proposals for recycling facilities shall have an approved closure plan.
- (2) All recycling facilities in operation as of the date of adoption of this chapter shall fully comply with this chapter or shall immediately proceed to close in accordance with the closure requirements provided in Section 1080.19.
(Ord. 99-06. Passed 5-19-99.)

1080.205 VEGETATIVE WASTE MANAGEMENT AND YARD WASTE COMPOSTING FACILITIES.

(a) General Requirements. All vegetative waste management and yard waste composting facilities are subject to the general requirements governing solid waste management facilities provided in this chapter and as specified herein. A permit and a CTO will be required prior to commencement of operations.

(b) Specific Design and Performance Standards. Proposals for vegetative waste management and yard waste composting facilities shall contain the following:

- (1) An environmental inventory as provided for in Section 1080.17(a)(1) shall be required. An investigation and report addressing soils and geotechnical conditions at the site to a depth of five feet and the effect of these conditions on the proposed facility operation will be required. Detailed geotechnical and

hydrogeological investigations and reports pursuant to Section 1080.17(a)(2) are not required. A geotechnical report may be required for any proposed structures. Additional reports may be required by the Director.

- (2) A construction plan as provided for in Section 1080.17(b) shall be required. The site plan shall include designated solid waste facility management sheet(s) which depicts only site conditions during operations as described in the operations plan.
- (3) Groundwater monitoring plans per Section 1080.17(c) are not required for facilities which process out waste within eighteen months of receipt on site.
- (4) A surface water monitoring plan as provided for in Section 1080.17(d) shall be required.
- (5) A leachate or liquid effluent control plan as provided for in Section 1080.17(e) shall be required.
- (6) An erosion control and storm water management plan, as provided for in Chapter 1220 of the Codified Ordinances of Loudoun County shall be required.
- (7) An operation and maintenance plan as provided for in Section 1080.17(f) shall be required.
- (8) A waste and recovery materials stockpile plan, which shall provide design and maintenance criteria for controlling effluents shall be required.
- (9) A copy of the DEQ-Water Division application for a surface discharge permit, or documentation that the site will operate as a no-discharge facility.
- (10) An environmental impairment surety as provided for in Section 1080.07 shall be required. The amount of the surety shall be calculated as the independent third party cost to remove all waste from the permitted site, pay transportation and disposal fees, restore permanent vegetation to the site, and include reasonable administrative costs to oversee the site restoration.

(c) Operational Standards. The operations and maintenance plan shall describe, in detail, the processes by which waste will be received, processed, stored, and otherwise managed while it is located at the facility. It will include necessary provisions to ensure compliance with the following standards:

- (1) All vegetative waste management and yard waste composting facilities will be operated and maintained in accordance with approved construction plans and specifications.
- (2) All vegetative waste management and yard waste composting facilities will be operated and maintained in accordance with any applicable State regulations and/or permits.
- (3) All vegetative waste management and yard waste composting facilities will be operated and maintained in accordance with the Zoning Ordinance, the Erosion and Sediment Control Ordinance and the County Fire Code.

- (4) Before commencing operation of a vegetative waste management or yard waste composting facility, the owner/operator shall have completed site and structure preparation in accordance with an approved comprehensive construction plan and shall have been issued a permit and CTO.
- (5) Vegetative waste and composted yard waste material collected at the facility shall be managed as described in the approved operations and maintenance plan.
- (6) Surface water monitoring shall be conducted in accordance with the approved surface water monitoring plan.
- (7) Burning, storage or burial of solid waste is prohibited at vegetative waste management and yard waste composting facilities.
- (8) All designated facility access and service roads shall be maintained in serviceable condition at all times. All designated fire breaks and windrow separation shall be maintained at all times.
- (9) No solid waste shall be permitted in windrows. Vegetative waste that is contaminated with solid waste, including bags, shall not be moved to or placed in windrows from the receiving area until all solid waste is removed. Residual solid waste materials shall be containerized and transported to an approved disposal facility.
- (10) The maximum height of vegetative waste windrow or stockpiles shall not exceed twenty feet and the maximum base perimeter of windrows and stockpiles shall not exceed 800 linear feet. Windrows and stockpiles shall be separated by a clear access way that shall be a minimum width of sixteen feet.
- (11) All vegetative waste that is stockpiled, windrowed, or otherwise processed or composted shall be removed from the site within eighteen months of the initial placement of the waste on the property.
- (12) All vegetative waste management and yard waste composting facilities will have designated waste receiving areas for in-processing of waste. Receiving areas will be sized to accept no more than the waste received in six working days or one working week, whichever is less. All non-permitted waste and contamination, such as plastic bags, will be removed in the receiving area before waste is moved to stockpiles or windrow locations. All putrescible waste in non-biodegradable bags shall be debagged or removed from the property within seventy-two hours of the initial placement of the waste in the receiving area. Short term storage of solid waste in approved containers in accordance with the requirements of Chapter 1082 is permitted.
- (13) Fugitive dust and mud deposits on off-site roads will be controlled at all times to limit nuisances.
- (14) Dust, odors, and vectors shall be controlled so that they do not constitute nuisances or hazards.

(d) Closure. All vegetative waste management and yard waste composting facilities are subject to the closure requirements provided in Section 1080.19 and as follows:

- (1) All proposals for vegetative waste management and yard waste composting facilities shall have an approved closure plan.
- (2) All vegetative waste management and yard waste composting facilities in operation as of the date of adoption of this chapter shall fully comply with all requirements of this chapter, including permitting requirements, or shall immediately proceed to close in accordance with the closure requirements provided in Section 1080.19.
- (3) Upon removal of all waste material from the facility site and completion of site restoration (grading of the site to remove ponds and other grading as may be required to ensure adequate drainage) and establishment of permanent vegetative cover, the facility owner may petition the Director for release of the environmental surety. Provided that the Director finds that the site has been restored and vegetated, and that there are no harmful residual effects of the facility operation, he or she shall release the environmental surety. No post-closure care or monitoring will be required if the surety is released. (Ord. 99-06. Passed 5-19-99.)

1080.21 MATERIALS RECOVERY FACILITIES.

(a) General Requirements. All materials recovery facilities are subject to the general requirements governing solid waste management facilities provided in this chapter and as specified herein:

- (1) The design and operation of materials recovery facilities shall be in conformance with the requirements presented in this section, as well as all County, State and Federal regulations. Close coordination will be maintained by the County with State agencies to minimize unnecessary duplication of requirements.
- (2) The collection or acceptance of sewage liquids or solids and solid or liquid hazardous wastes is prohibited.
- (3) The burial of any solid waste is prohibited on the site.

(b) Specific Design and Performance Standards. Proposals for materials recovery facilities shall contain the following:

- (1) Site analysis information. A hydrogeological investigation is not required for a materials recovery facility. Geotechnical investigation requirements are limited to compliance with the Facilities Standards Manual as related to new buildings.
- (2) Construction plans.
- (3) A surface water monitoring plan if the site is not controlled as defined in this chapter.

- (4) A leachate or liquid effluent control plan to account for seepage from temporarily stored waste, excess liquid from air pollution or dust control or other liquids.
- (5) An erosion control and storm water management plan.
- (6) An operation and maintenance plan.
- (7) A waste and recovery materials stockpile plan that shall provide design and maintenance criteria for controlling effluents.

A ground water monitoring plan is not required for materials recovery facilities.

(c) Operational Standards. The operations and maintenance plan shall include necessary provisions to ensure compliance with the following standards:

- (1) The materials recovery facility will be operated and maintained in accordance with approved construction plans and specifications and the operations manual.
- (2) Before commencing operation of a materials recovery facility, the permittee shall have completed site and structure preparation in accordance with an approved comprehensive construction plan and plan of operation and shall have been issued a CTO.
- (3) Surface water monitoring consistent with Section 1080.17(d) may be required by the Director.
- (4) Burning, storage or burial of solid waste is prohibited at the materials recovery facility.
- (5) Materials collected at the materials recovery facility will be transferred from the facility as described in the approved operation and maintenance plan or as required by the Director or demands on the facility.

(d) Closure. All materials recovery facilities are subject to closure requirements provided in Section 1080.19 and as follows:

- (1) All applications for materials recovery facilities shall have a closure plan.
- (2) All materials recovery facilities in operation as of the date of adoption of this chapter shall fully comply with this chapter or shall immediately proceed to close in accordance with the closure requirements provided in Section 1080.19.

(Ord. 99-06. Passed 5-19-99.)

1080.22 LANDFILLS.

(a) General Requirements. All landfills are subject to the general requirements governing solid waste management facilities provided in this chapter and as specified herein. The application of these requirements shall be consistent with the Virginia Solid Waste Management Regulations. The County may accept an application as submitted to the DEQ to address the provisions of this chapter. Applications submitted to the DEQ shall be submitted concurrently to the County. The review and approval of permit applications for these facilities

shall occur concurrently with the review and approval by the Virginia Department of Environmental Quality. A permit shall not be issued until all permitting conditions of the VSWMRs are met.

(b) Specific Design and Performance Standards. Proposals for landfills shall contain the following:

- (1) Site-analysis and facility siting information in accordance with the VSWMRs.
- (2) Design plans in accordance with the VSWMRs.
- (3) A groundwater monitoring plan in accordance with the VSWMRs.
- (4) A surface water monitoring plan in accordance with the VSWMRs.
- (5) A leachate control plan in accordance with the VSWMRs.
- (6) An erosion control and storm water management plan in accordance with the VSWMRs.
- (7) An operation and maintenance plan in accordance with the VSWMRs.
- (8) A gas monitoring and control plan in accordance with the VSWMRs.

(c) Operational Standards. All landfills shall operate in accordance with the approved operations and maintenance plans. Operations and maintenance plans shall include necessary provisions to ensure compliance with the following standards:

- (1) The landfill will be operated and maintained in accordance with approved design and construction plans and specifications and the operations manual.
- (2) Before commencing operation of a landfill, the permittee shall have completed the site preparation in accordance with the approved comprehensive construction plan, site plan and plan of operation.
- (3) No landfilling may occur prior to the issuance of a CTO in accordance with this chapter.
- (4) No landfilling may occur prior to occupancy approval by the Director of Building and Development.
- (5) Maximum compactive effort during the course of construction and operations will be made to support the eventual use of the site.
- (6) A groundwater monitoring program shall be conducted in accordance with the VSWMRs.
- (7) A surface water monitoring program shall be conducted in accordance with the VSWMRs.
- (8) A gas monitoring program shall be conducted in accordance with the VSWMRs.
- (9) A leachate monitoring program shall be conducted in accordance with the VSWMRs.

(d) Closure. All landfills are subject to closure requirements in accordance with the VSWMRs.

(e) Surety. All landfill facilities are required to provide the County an environmental impairment surety in accordance with Section 1080.07. The amount of the surety shall be calculated as the independent third party cost to remove all waste from the permitted site, pay transportation and disposal fees, conduct long term environmental monitoring and post-closure site maintenance, and include reasonable administrative costs to oversee the site restoration and post-closure care.
(Ord. 99-06. Passed 5-19-99.)

1080.23 SOLID WASTE TRANSFER STATIONS.

(a) General Requirements. All solid waste transfer stations are subject to the general requirements governing solid waste management facilities provided in this chapter and as specified herein:

- (1) The design and operation of transfer stations shall be in conformance with the requirements presented in this section, as well as all County, State and Federal regulations. Close coordination will be maintained by the County with State agencies to minimize unnecessary duplication of requirements.
- (2) The collection of sewage liquids or solids and solid or liquid hazardous wastes is prohibited.
- (3) The burial of any solid waste is prohibited on the site.

(b) Specific Design and Performance Standards. Proposals for solid waste transfer stations shall contain the following:

- (1) Site analysis information. Hydrogeological investigations are not required for a solid waste transfer station. Provisions of a Type-II Geotechnical Report in accordance with the Facilities Standards Manual for the proposed facility structure shall fulfill the requirements for geotechnical investigation for solid waste transfer stations.
- (2) Construction plans.
- (3) A surface water monitoring plan, if the site is not controlled as defined in this chapter. The plan shall provide for management and treatment of runoff from waste handling and treatment areas.
- (4) A leachate or liquid effluent control plan to account for seepage from temporarily stored waste, excess liquid from air pollution or dust control or other liquids.
- (5) An erosion control and storm water management plan.
- (6) An operation and maintenance plan.

A ground water monitoring plan is not required for solid waste transfer stations.

(c) Operational Standards. The operations and maintenance plan shall include necessary provisions to ensure compliance with the following standards:

- (1) The transfer station will be operated and maintained in accordance with approved construction plans and specifications and the operations manual.
- (2) Before commencing operation of a transfer station, the permittee shall have completed site and structure preparation in accordance with an approved

comprehensive construction plan and plan of operation and shall have been issued a CTO.

- (3) Surface water monitoring consistent with Section 1080.17(d) may be required by the Director.
- (4) Burning, storage or burial of solid waste is prohibited at the transfer station.
- (5) Solid waste collected at the station will be transferred from the station at least daily or as required by the demands on the facility.

(d) Closure. All solid waste transfer stations are subject to closure requirements provided in Section 1080.19 and as follows:

- (1) All applications for solid waste transfer stations shall have a closure plan.
- (2) All solid waste transfer stations in operation as of the date of adoption of this chapter shall fully comply with this chapter or shall immediately proceed to close in accordance with the closure requirements provided in Section 1080.19. (Ord. 99-06. Passed 5-19-99.)

1080.24 SOLID WASTE INCINERATOR FACILITIES.

(a) General Requirements. All incinerator facilities are subject to the general requirements governing solid waste management facilities provided in this chapter and as specified herein. The application of these requirements shall be consistent with the Virginia Solid Waste Management Regulations. The review and approval of permit applications for these facilities shall occur concurrently with the review and approval by the Virginia Department of Environmental Quality. A permit shall not be issued until all permitting conditions of the VSWMRs are met.

(b) Design And Performance Standards. Proposals for incinerator facilities shall contain the following:

- (1) Site analysis information that addresses all facility siting requirements of the VSWMRs.
- (2) Design and construction plans in accordance with the VSWMRs.
- (3) An environmental monitoring plan in accordance with the VSWMRs.
- (4) A leachate or liquid effluent control plan to account for seepage from temporarily stored waste, excess liquid from air pollution or dust control or other liquids in accordance with the VSWMRs.
- (5) An erosion control and storm water management plan as described in Chapter 1220 of the Codified Ordinances of Loudoun County.

(c) Operational Standards.

- (1) An operation and maintenance plan shall be required in accordance with the VSWMRs.
- (2) Solids, residue, fly ash and bottom ash shall be disposed of in accordance with the VSWMRs.

- (3) Any effluent from an incinerator shall be treated as an industrial waste and subsequently handled and disposed of in accordance with the VSWMRs.
- (4) Air discharges shall be in accordance with the VSWMRs.
- (5) A waste and materials stockpile plan shall be required in accordance with the VSWMRs.

(d) Closure. All incinerator facilities are subject to closure requirements in accordance with the VSWMRs.

(e) Surety. All incinerator facilities are required to provide the County an environmental impairment surety in accordance with Section 1080.07. The amount of the surety shall be calculated as the independent third party cost to remove all waste from the permitted site, pay transportation and disposal fees, conduct long term environmental monitoring and post-closure site maintenance, and include reasonable administrative costs to oversee the site restoration and post-closure care.
(Ord. 99-06. Passed 5-19-99.)

1080.25 EXPERIMENTAL SOLID WASTE MANAGEMENT FACILITIES.
(REPEALED)

(EDITOR'S NOTE: Section 1080.25 was repealed by Ordinance 98-14, passed November 18, 1998.)

1080.26 EXISTING SITES AND FACILITIES. (REPEALED)

(EDITOR'S NOTE: Section 1080.26 was repealed by Ordinance 98-14, passed November 18, 1998.)

1080.27 EQUITABLE REMEDIES.

In addition to the penalty provided in Section 1080.99, the Director may initiate injunction, mandamus, abatement or any other appropriate action to prevent, enjoin, abate or remove a violation of any of the provisions of this chapter.
(Ord. 99-06. Passed 5-19-99.)

1080.99 PENALTY.

(EDITOR'S NOTE: See Section 202.99 for general Code penalty if no specific penalty is provided.)

- (a) In addition to the penalties provided in Section 202.99 and this section, a conviction for a violation of any of the provisions of this chapter shall be cause for the revocation of any and all permits issued under this chapter.
- (b) Whoever fails to comply with a valid warrant obtained pursuant to Section 1080.03 is guilty of a Class 3 misdemeanor and shall be fined not more than five hundred dollars (\$500.00).
(Ord. 99-06. Passed 5-19-99.)

APPENDIX K
BOARD OF SUPERVISORS LANDFILL POLICY

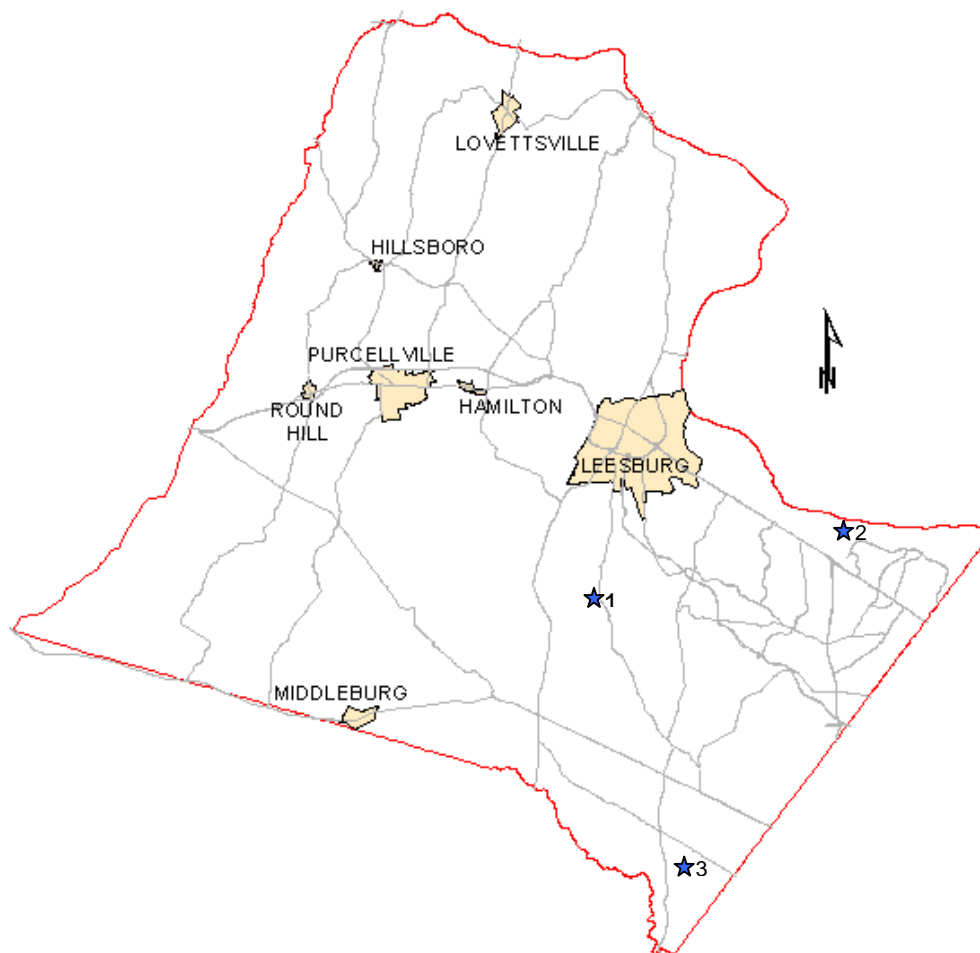
JULY 1, 2003

1. Loudoun County will provide a sanitary landfill to assure an adequate waste disposal option to County residents. The County will own, permit, construct, and operate a municipal solid waste landfill at 20939 Evergreen Mills Road. The landfill will be publicly operated, or at the discretion of the Board of Supervisors, by a private contractor.
2. Use of the County Landfill is restricted to waste generated within the County. Only County residents, businesses, and institutions located in the County, or permitted haulers and authorized contractors acting on behalf of the authorized parties are permitted to bring waste to the landfill.
3. The County Solid Waste Management Facility will operate six days a week (M-S) to provide an important solid waste management and disposal option to prevent the County, residents, and businesses from relying on sole source providers of solid waste services. The County Administrator is charged with achieving a workable balance between conservation of permitted disposal capacity, and revenue neutrality among tipping fee revenue, operations costs, and capital construction costs.
4. Disposal operations at the current landfill will be funded through the County's General Fund and costs are partially offset through tipping fees.
5. Construction of future cells or phases will be scheduled to assure uninterrupted disposal services. The County will maintain sufficient landfill capacity to be able to adequately respond to the County's total waste disposal demand but is relying on privately owned and operated facilities to moderate the demand thus prolonging the life of the County facility.
6. The landfill facility shall be open to the public for business Monday through Saturday, from 8 AM-4 PM, except for major holidays.
7. The landfill shall operate under a user fee schedule adopted by the Board that shall be based on the weight and type of waste, with surcharges for items that are more costly to handle.
8. Only the Board can waive user fees at the landfill. The Board will consider and act on requests for fee waivers on a biennial budget cycle administered by the Budget Office.
9. The County will permit and obtain construction bid documents for the initial phase of WRSWMF to ensure availability of future disposal capacity.

APPENDIX K
BOARD OF SUPERVISORS LANDFILL POLICY

10. The County will permit, construct, and operate Phase III which overlays Phase IIA & B while processed waste disposal demand is reduced and temporarily delay construction start-up of the Woods Road Disposal Unit.
11. The facility shall be operated in accordance with all applicable local, state, and federal law.
12. The special recycling services provided at the County landfill site include waste oil, used automobile batteries, waste antifreeze, scrap metal and appliances, scrap tires, construction wood waste, and yard waste.
13. A combination of general fund support, user fees and a small amount of revenues from the sale of recyclables will fund the special Dropoff Center services at the County landfill.
14. The facility will operate the *FastTrash* program on Saturdays only, to expedite customer service pursuant to the procedures adopted by the Board of Supervisors on October 21, 2002, or as subsequently identified by the Board.

APPENDIX L INVENTORY OF KNOWN DISPOSAL SITES



1. Loudoun County Solid Waste Management Facility
20939 Evergreen Mills Road, Leesburg
Disposal site for solid waste on 186 acres from 1971 to present under State Permit Nos. 1 and 570.
2. Hidden Lane Landfill
One mile northeast of State Routes 7 and 28, Sterling
Disposal site for CDD waste on 149 acres from 1983 to 1997 under State Permit No. 356.
3. Ticonderoga Farms/SWPP Development Corp.
26175 Ticonderoga Road, Chantilly
Disposal site for vegetative waste on approximately 76 acres from 1989 to 2000.

There may be other sites within the District that have not been identified. Most of the incorporated towns had individual dumpsites at one time. As additional sites are identified, they will be added to the inventory.

APPENDIX M
BOARD OF SUPERVISORS RECYCLING POLICY

JULY 1, 2003

1. The County will maintain an organizational structure to measure, achieve, and maintain a Loudoun SWMP District recycling rate of 25% as measured by the Virginia Department of Environmental Quality (DEQ).
2. The County will require residents to separate certain materials for recycling.
3. The County will require businesses to recycle their principle recyclable material.
4. The County will require haulers/collection companies to collect and recycle materials separated by residents and businesses, consistent with this policy.
5. The County will site, construct, and operate Recycling Dropoff Centers (DOCs) to afford residents an opportunity to recycle where no curbside service exists and to recycle materials that are not commonly collected in curbside programs.
6. The County's goal is to establish and/or maintain DOCs centers within a five-mile distance of all County residents.
7. The County goal is to have DOCs serve no more than 10,000 population. When that population figure is reached in a service area, the County will consider the establishment of a new DOC location as part of the regular budget process.
8. All DOCs will provide for standardized recycling of (1) co-mingled containers including metal, plastic and glass containers; (2) newspaper; and (3) cardboard.
9. All recycling DOCs should meet reasonable site standards including all-weather container pads, landscaping, signage, screening and buffering, provided that the application of such standards take into account the specific site location and related conditions.
10. The County will provide Dropoff Center servicing by the most cost-effective means possible. DOC site services, including maintenance, transport, and marketing of recycled materials will be provided by contracted services.
11. The recycling containers are standardized as a thirty and forty-cubic yard roll off containers, which the County will own. County ownership of

APPENDIX M
BOARD OF SUPERVISORS RECYCLING POLICY

containers enhances competition for the service contract and affords the best protection for continued service in the event of contractor default.

12. County staff will provide routine contract oversight of County operated DOCs and will provide for non-routine maintenance.
13. All recycling DOCs should be on public sites or, at a minimum, on sites controlled by public easements or leases.
14. The County will provide opportunities to recycle special materials that can not or should not be disposed of in landfills including scrap tires, scrap metal, waste oil, waste antifreeze, appliances, and wet cell batteries.
15. The County will offer Household Hazardous Waste collection at locations distributed around the County on a scheduled basis to provide opportunities to residents and small businesses to divert these hazardous materials from improper disposal.
16. The County will support recycling efforts by providing a pricing preference in procurement of recycled paper products.
17. The County will lead by example by implementing effective recycling strategies and programs.
18. The County will maintain a mixed paper recycling program in County buildings.
19. The County will conduct a comprehensive public education and recycling information program to inform residents of the value of recycling and the opportunities to recycle.

APPENDIX N RECYCLING DROPOFF CENTERS

Recycling Center Name and Location	News-Paper Magazines Phonebooks Catalogs	Glass Bottles & Jars	Aluminum Cans	Steel Cans	Plastic Bottles	Card-board	Other
Arcola Arcola Community Center (Gum Springs Road)	M	M	M	M	M	M	
Central Western Loudoun Recycling Center Colonial Hwy., Hamilton	M	M	M	M	M	M	
Hillsboro Hillsboro Elementary School	M	M	M	M	M	M	
Landfill Route 621, 4 miles south of Leesburg	M	M	M	M	M	M	1
Lovettsville The George Center (Rts. 287 & 672)	M	M	M	M	M	M	
Lucketts Lucketts Elementary School	O	O	O		M	M	
Mercer Park Carters Farm Lane, 1 mile east of Middleburg	M	M	M	M	M	M	
Park View High School West Laurel Avenue, Sterling Park	M*	M	M	M	M	M	2
Philomont Philomont Fire Station	M	M	M	M	M	M	

Notes:

M = Daily collection

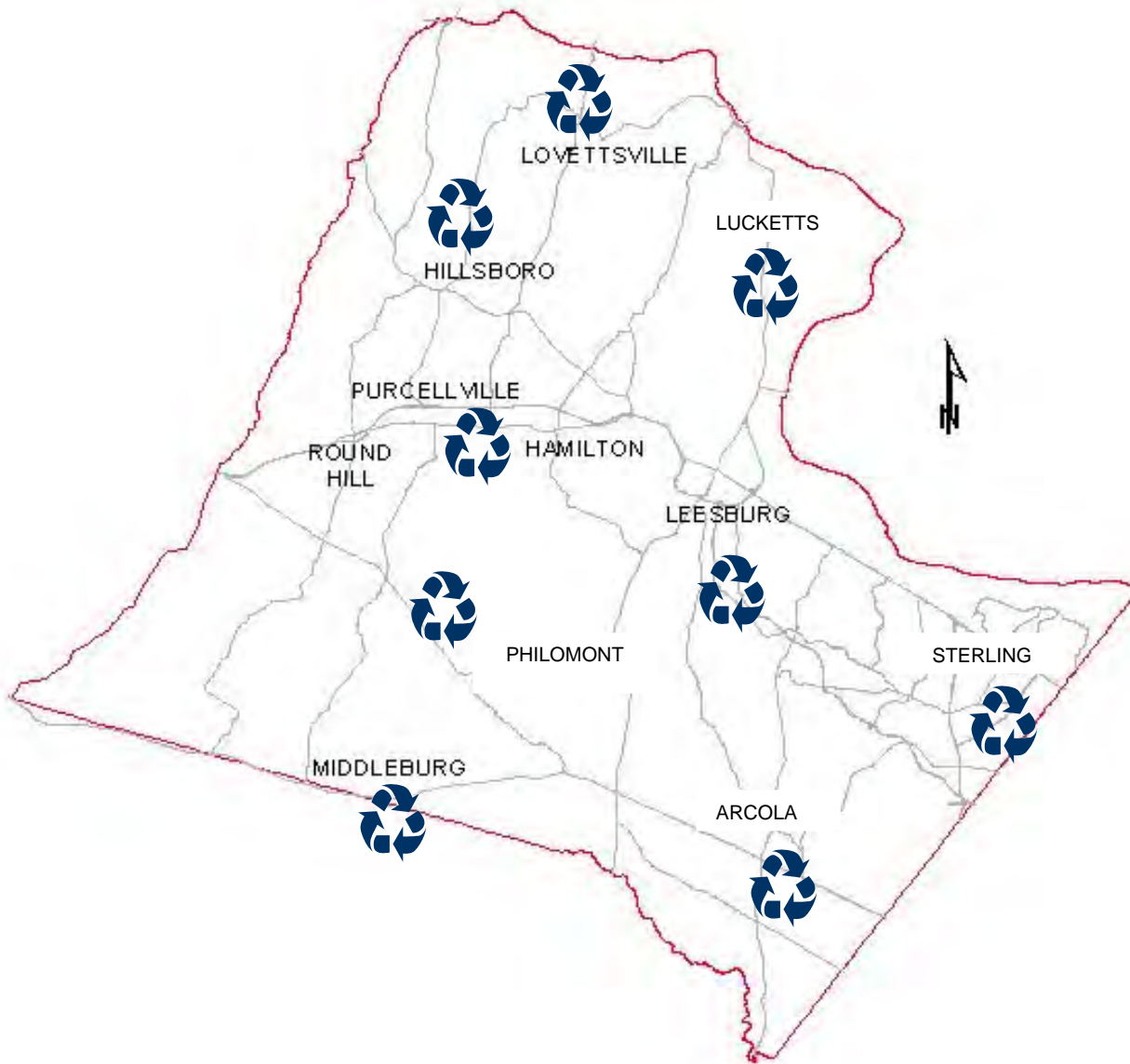
M* = Newspaper Only

O = Saturday collection only

1 = Used motor oil, used anti-freeze, and used automobile batteries

2 = Expanded Polystyrene (EPS) packing blocks (Saturday only collection)

APPENDIX N RECYCLING DROPOFF CENTERS



APPENDIX O
COMMONWEALTH OF VIRGINIA LOCALITY RECYCLING RATE REPORT



Commonwealth of Virginia
Locality Recycling Rate Report
For Calendar Year 2001

Contact Information

Reporting Jurisdiction: _____

Person Completing This Form: _____

Title: _____

Address: _____
Street/P.O. Box **City** **State** **Zip**

Phone #: (____) _____ **Fax #:** (____) _____

Email Address: _____

Member Governments (The local governments identified in your regional solid waste management plan): _____

Calculated Recycling Rate: Using the formula provided below and the information identified on Page 2 calculate your recycling rate for the reporting period.

$$\frac{[P + S]}{[P + S + M]} \times 100 = \text{Recycling Rate}$$

$$\frac{[\text{____} + \text{____}]}{[\text{Total PRM (P)} + \text{Total SRM (S)} + \text{Total MSW (M)}]} \times 100$$

[Total PRM (P) + Total SRM (S)] / [Total PRM (P) + Total SRM (S) + Total MSW (M)] X 100

= _____ %

Recycling Rate

I certify that I have personally examined and am familiar with the information submitted in this form and any attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. These records will be made available for auditing purposes, if requested.

Authorized Signature

Title

Date

Return completed form by April 30, 2002 to: Virginia DEQ, Attn: Recycling Rates, P.O. Box 10009, Richmond, VA 23240.

APPENDIX O

COMMONWEALTH OF VIRGINIA LOCALITY RECYCLING RATE REPORT

Part I: Principal Recyclable Material (PRM): Report only PRM generated within the reporting jurisdiction(s), NOT imported PRM.

<u>PRM TYPE</u>	<u>RECYCLED AMOUNT (TONS)</u>
Paper	_____
Metal	_____
Plastic	_____
Glass	_____
Yard Waste (Composted or Mulched)	_____
Wood	_____
Textiles	_____
TOTAL PRM	_____ (P)

Part II: Supplemental Recyclable Material (SRM): Report only SRM generated within the reporting jurisdiction(s), NOT imported SRM.

<u>SRM TYPE</u>	<u>RECYCLED AMOUNT/Tons</u>	<u>REUSED* AMOUNT/Tons</u>
Waste Tires	_____	_____
Used Oil	_____	_____
Used Oil Filters	_____	_____
Used Antifreeze	_____	_____
Automobile Bodies	_____	_____
Construction Waste	_____	_____
Demolition Waste	_____	_____
Debris Waste	_____	_____
Batteries	_____	_____
Ash	_____	_____
Sludge	_____	_____
Tree Stumps (> 6" Diameter)	_____	_____
Other (_____)	_____	_____
SUBTOTALS	_____ (RECYCLED SRM)	_____ (REUSED SRM)
TOTAL SRM	_____ (S)	

**Material separated from the waste stream and used, without processing or changing its form, for the same or another end use.*

Part III: Total Municipal Solid Waste (MSW) Disposed:** Report only MSW generated within the reporting jurisdiction(s), NOT imported waste.

<u>MSW TYPE</u>	<u>TOTAL AMOUNT DISPOSED (TONS)</u>
Household	_____
Commercial	_____
Institutional	_____
Other***	_____
TOTAL MSW DISPOSED	_____ (M)

***Disposed for the purpose of this report means delivery to a permitted sanitary landfill or waste incinerator for disposal, ***May add total amounts of SRM generated, if known.*

APPENDIX O

COMMONWEALTH OF VIRGINIA LOCALITY RECYCLING RATE REPORT

Amended Regulations for the Development of Solid Waste Management Plans (9 VAC 20-130-10 et seq.) became effective on August 1, 2001. The amended regulations require that Regions as well as each city, county, and town not part of a designated Region in the Commonwealth develop complete, revised solid waste management plans. Section 9 VAC 20-130-120 B & C of the Regulations requires that a minimum recycling rate of 25% of the total municipal solid waste generated annually in each city, county, town, or region be maintained. It also requires that the plan describe how this rate shall be met or exceeded and requires that the calculation methodology be included in the plan. Section 9 VAC 20-130-165 D establishes that every city, county, and town in the Commonwealth, or solid waste management planning region shall submit to the department by April 30 of each year, the data and calculations required in 9 VAC 20-130-120 B & C for the preceding calendar year.

PLEASE NOTE: IF YOUR LOCALITY'S RECYCLING PROGRAM IS INCORPORATED INTO A DESIGNATED REGION'S PROGRAM, YOU WILL ONLY NEED TO FILL IN THE CONTACT INFORMATION SECTION FOR YOUR LOCALITY AND SPECIFY THE REGION.

It is requested that the amounts included on the form be listed in **tons**, rounded to the nearest whole ton. If actual weights are not known, volumes can be converted to weight estimates. To assist you with these estimates, a standardized volume-to-weight conversion table is attached.

Contact Information Section: Please provide information on the Reporting Jurisdiction and information on the individual completing this form. Under Member Governments, please list the local governments identified in the applicable solid waste management plan, unless the plan indicates the participating local governments will be reporting on the status of their recycling collection programs independently.

Calculated Recycling Rate Section: Using the formula provided, calculate your recycling rate for the reporting period from information identified in the Recycling Rate Calculations Section.

Signature Block Section: Please provide an authorized signature prior to submitting the completed form.

Recycling Rate Calculations Section: Please provide the requested information:

Part I: Principal Recyclable Material (PRM): Report the amount in tons of each PRM collected for recycling in the named jurisdiction(s) during the reporting period. PRMs include paper, metal (except automobile bodies), plastic, glass, yard waste, wood, and textiles. It does not include large diameter tree stumps. The total weight in **tons** of all PRMs collected for recycling represents the letter **P** in the Recycling Rate Calculation.

Part II: Supplemental Recyclable Material (SRM): Report the amount in tons of each SRM recycled and the amount reused in the named jurisdiction(s) during the reporting period for each of the requested categories. (For a material to classify as "reused" a solid waste material must be separated from the waste stream and used, without processing or changing its form, for the same or another end use. SRMs include waste tires, used oil, used oil filters, used antifreeze, automobile bodies, construction waste, demolition waste, debris waste, batteries, ash, sludge and large diameter tree stumps, and other materials as may be authorized by the Director. The total weight in **tons** of all SRMs collected for recycling and/or reuse represents the letter **S** in the Recycling Rate Calculation.

Vegetative and Yard Waste Material may only be counted towards your recycling rate if they are being mulched or composted, and used for agricultural or landscaping purposes.

Part III: Total Municipal Solid Waste (MSW) Disposed: Report the total amount in **tons** of MSW that was disposed of by the reporting jurisdiction(s) during the reporting period for each of the source categories (Household, Commercial, Institutional, and Other). For the purpose of this report, "disposed," means delivery to a permitted sanitary landfill or waste incinerator for disposal. Totals for each of these categories should include only the amount of MSW generated by and then disposed of by the reporting jurisdiction(s). The total weight in tons of MSW disposed of represents the letter **M** in the Recycling Rate Calculation.

APPENDIX O

COMMONWEALTH OF VIRGINIA LOCALITY RECYCLING RATE REPORT

Locality Recycling Report Conversion Table

Material	Volume	Weight in Pounds
Metal		
Aluminum Cans, Whole	One cubic yard	50-74
Aluminum Cans, Flattened	One cubic yard	250
Aluminum Cans	One full grocery bag	1.5
Ferrous Cans, Whole	One cubic yard	150
Ferrous Cans, Flattened	One cubic yard	850
Automobile Bodies	One vehicle	2,000
Paper		
Newsprint, Compacted	One cubic yard	720-1,000
Newsprint	12" stack	35
Corrugated Cardboard, Loose	One cubic yard	300
Corrugated Cardboard, Baled	One cubic yard	1,000-2,000
Plastic		
PETE, Whole, Loose	One cubic yard	30-40
PETE, Whole, Loose	Gaylord	40-53
PETE, Whole, Baled	30" x 62"	500
Film, Baled	30" x 42" x 48"	1,100
Film, Baled	Semi-Load	44,000
Film, Loose	Standard grocery bag	15
HDPE (Dairy Only), Whole, Loose	One cubic yard	24
HDPE (Dairy Only), Baled	32" x 60"	400-500
HDPE (Mixed), Baled	32" x 60"	900
Mixed PET & Dairy, Whole, Loose	One cubic yard	32
Mixed PET, Dairy & Other Rigid (Whole, Loose)	One cubic yard	38
Mixed Rigid, No Film	One cubic yard	49
Glass		
Glass, Whole Bottles	One cubic yard	600-1,000
Glass, Semi-Crushed	One cubic yard	1,000-1,800
Glass, Crushed (Mechanically)	One cubic yard	800-2,700
Glass, Whole Bottles	One full grocery bag	16
Glass, Uncrushed to Manually Broken	55 gallon drum	125-500
Arboreal		
Leaves, Uncompacted	One cubic yard	250-500
Leaves, Compacted	One cubic yard	320-450
Leaves, Vacuumed	One cubic yard	350
Wood Chips	One cubic yard	500
Grass Clippings	One cubic yard	400-1,500
Other		
Battery (Heavy Equipment)	One	60
Battery (Auto)	One	35.9
Used Motor Oil	One gallon	7.4
Tire - Passenger Car	One	20
Tire - Truck, Light	One	35
Tire - Semi	One	105
Antifreeze	One gallon	8.42
Food Waste, Solid & Liquid Fats	55 gallon drum	412