

REQUEST FOR BOARD ACTION

HENDERSON COUNTY BOARD OF COMMISSIONERS

MEETING DATE: May 19, 2006

SUBJECT: PUBLIC HEARING
UPDATE – 10 YEAR SOLID WASTE
MANAGEMENT PLAN

ATTACHMENTS: MEMORANDUM
COPY OF UPDATE
RESOLUTION
NOTICE OF PUBLIC HEARING

SUMMARY OF REQUEST:

In 1997 the County prepared a 10- Year Solid Waste Management Plan in accordance with requirements from the N.C. Division of Solid Waste. We are required to Update the plan every three years. All of the County Municipalities joined with the County. Otherwise the Municipalities would have to develop independent plans. The original plan was developed by staff in cooperation with the Municipalities and the Solid Waste Advisory Committee (SWAC). The Updates have been developed by the Office of the County Engineer. The current update has been reviewed by the Municipalities and the SWAC. Comments by the SWAC were incorporated into the Update. To date the Village of Flat Rock and Town of Laurel Park have adopted the Update by resolution. It is our understanding that Hendersonville, Fletcher and Mills River will also be adopting the update.

The purpose of the public hearing is to gain public input on the Update. The Public Hearing was advertise in the Hendersonville Times News. Following the public hearing the Board may adopt the Update to the 10 Year Solid Waste Management Plan by Resolution.

The County Engineer will be present to discuss this matter with the Board of Commissioners.

STAFF RECOMMENDATION/ACTION REQUIRED:

It is recommended that the Board adopt the Update to the Henderson County 10-Year Solid Waste Management Plan and approve attached resolution.

HENDERSON COUNTY BOARD OF COMMISSIONERS

100 North King Street
Hendersonville, North Carolina 28792-5097
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WILLIAM L. MOYER
Chairman
CHARLIE MESSER
Vice-Chairman

SHANNON BALDWIN
CHUCK MCGRADY
LARRY YOUNG

RESOLUTION

WHEREAS, better planning for solid waste will help protect public health and the environment, provide for an improved solid waste management system, better utilize our natural resources, control the cost of solid waste management, and

WHEREAS, N.C. General Statute 130-A309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a 10-year comprehensive Solid Waste Management Plan and to update this plan every three years; and

WHEREAS, Henderson County has provided adequate opportunity for public input on the update to the 10-year Solid Waste Management Plan, by means of a public meeting held on May 19, 2006;

NOW, THEREFORE, BE IT RESOLVED that the Henderson County Board of Commissioners hereby approves the Henderson County 10 Year Solid Waste Management Plan Update.

Adopted this the 19th of May 2006.

APPROVED BY:

WILLIAM MOYER, CHAIRMAN
HENDERSON COUNTY BOARD OF COMMISSIONERS

ATTESTED BY:

ELIZABETH W. CORN
CLERK TO THE BOARD

Memo

To: Steve Wyatt, County Manager
From: Gary T. Tweed, P.E.
Date: 4/28/2006
Re: Update to 10-Year Solid Waste Management Plan

Every 3 years the County is required by the N.C. Division of Solid Waste to update the 10-Year Solid Waste Management Plan. The original plan was developed in 1997 by staff and I have provided the updates for 2000, 2003 and now 2006. All of the municipalities have joined with the County in this plan. This relieves them of the requirement to develop their own plan. I have heard from all of the municipalities except Hendersonville, have received adopting resolutions already from Laurel Park and Flat Rock. I expect to receive all municipal resolutions by the time we need to submit the update in June.

The Solid Waste Advisory Committee reviewed the update during March and April and made some suggested changes at their April 17th meeting. These changes have been incorporated into the update. We are required to hold a public hearing and our Board adopt the plan by resolution. The public hearing is scheduled for the May 19th Board meeting and will be advertised in the Hendersonville Times News.

A copy of the update is enclosed along with a resolution, for adoption by the Board at their May 19, 2006 meeting. Should you wish to meet to discuss the update, please advise.

Henderson County 10-Year Solid Waste Management Plan Update

Henderson County Solid Waste Department
802 Stoney Mountain Road
Hendersonville, North Carolina 28791

2006

Prepared by
The Office of the County Engineer
Henderson County

Gary T. Tweed, P.E.



A-18-06

Table of Contents

	Pages
Executive Summary	1-5
Waste Reduction Goal Sheet	6
Check List	7
County & Municipal Board Resolutions	Appendix A Tab 1
Public Hearing Advertisement	Appendix B Tab 2
Map	Appendix C Tab 3
Waste Characterization	Appendix D Tab 4
Full Cost Accounting & Waste Reduction Goal	Appendix E Tab 5
Planning Element Sheets & Narrative	Appendix F Tab 6
Solid Waste Ordinance & Support Documents	Appendix G Tab 7
Correspondences	Appendix H Tab 8

2006 Update to the Henderson County 10 Year Solid Waste Management Plan Executive Summary

Henderson County is one of the fastest growing counties in North Carolina. The change in population from 1990 to 2000 census was from 69,285 to 89,173 an increase of 19,888 or 28.7%. The 2005 population is estimated at 96,124. The County ranks 28th out of 100 counties in population. In percent growth, Henderson County is 15th fastest growing county in North Carolina. The county is experience a strong economy. Even with this rapid growth and budget constraints at both the State and local level, the County strives to maintain its goal for waste reduction of 5% for 2016. This goal has been met or exceeded for many of the years since the baseline year of 1991-1992. Only 1996-1997, 1997-1998, 1999-2000, 2002-2003, 2003-2004, 2004-2005 did not meet the 5% goal. The other years ranged from a low of -5% to a high of 21% reduction. Henderson County does not provide any collection services and does not control collection of solid waste. This has resulted in the fluctuation of solid waste flow into the County facility. One private waste hauling company, GDS, in particular moves in and out of the County facility based on lower tip fees at other facilities. The Henderson County Solid Waste Transfer Station competes with the Waste Management Transfer Station in Buncombe County and the Buncombe County Landfill. The amount of Solid Waste that goes to the Buncombe County Landfill is unknown since GDS operates in both Counties. In those years that GDS uses our facility the waste reduction goal is not being met. In those years that GDS hauls outside the county the 5% solid waste reduction goal has been achieved. The County plans to continue to try to achieve the 5% solid waste reduction goal through improvements to recycling and other programs. We recognize that since the County does not control collection that this may be difficult.

Henderson County Solid Waste Program

Henderson County at the end of 1997 closed its municipal solid waste (MSW) landfill and began the transfer of MSW to a private landfill (Palmetto Landfill) owned and operated by Waste Management, Inc. The County operates one solid waste transfer station located on Stoney Mountain Road in the central part of the County. The Solid Waste Transfer Station receives MSW, Construction & Demolition (C&D) Waste, White Goods (Scrap Metals), Tires, Wood & Yard Waste, and household recyclables. All solid waste materials except C&D are transfer to other facilities. The County also operates a Solid Waste Enforcement program and one recycling center for household recyclables. A description of each of the waste streams and method of operation follows:

MSW - The MSW is transferred to the Palmetto Landfill by contract with Waste Management, Inc. The current contract is through 2010 and Waste Management has informed the County that they would be able to serve the County at the Palmetto Landfill or other Waste Management Landfills for 10 years. The Palmetto Landfill will be available for about another 5 years, and Waste Management is developing a new landfill

just South of Spartanburg S.C. to replace Palmetto. Current tipping fee for MSW is \$47.91/ton and cost for transportation and disposal at the Palmetto Landfill is \$33.47/ton. Approximately 69,000 tons of MSW were processed through the Henderson County Solid Waste Transfer Station for FY 2004-2005

C&D - The County continues to operate a C&D Landfill at the Stoney Mountain Road Solid Waste Facility. This facility should continue operation for approximately 1 to 2 more years. The facility received 12,627 tons of C&D material during FY 2004-2005. Current tipping fee for C&D is \$47.91/ton. By operating our own landfill for this material, the County avoids the \$33.47/ton disposal costs for use of the Palmetto Landfill. This results in a significant savings to the program. Upon closure of the C&D Landfill, this waste stream will be transferred out of the County with MSW.

White Goods - White Goods (appliances) and scrap metal are received at no charge. During FY 2001-2002 approximately 1,538 tons were collected. The County contracts with Stateline Scrap Metal, which removes the white goods, and scrap metal to their recovery facility in Gastonia, N.C. Currently the County receives revenue from the sale of this material based on market values.

Tires - The County receives approximately 1,513 tons of tires per year. This is approximately 151,300 tires. Tires are manually loaded into tractor-trailers and shipped by U.S. Tire, Inc. to their facility in Concord, N.C. By State Law the County is not allowed to charge for tires, yet receives the tire tax collected by the State of North Carolina. Current costs to the County for the tire program is approximate \$125/ton. The tire tax does not cover the entire cost. The State due to budget constraints has held back portions of the tire tax funds. This results in the tire program having to be supplement from tipping fees collected for other waste streams.

Wood & Yard Waste - Wood & Yard Waste is received at the transfer station at approximately 1,472 tons/year. The current tipping fee for this material is \$47.91/ton. The County contracts the grinding of this material to mulch at a cost of approximately \$20/ton. Past contracts cover the cost of grinding and the mulch is free to the public for used as landscape mulch.

Household Recyclables - The County operates one recycling center for household recyclables, waste oil, and antifreeze. The current program allows citizens to drop off recyclables and an equal amount of MSW at no charge. The recyclables include containers (glass, metal, plastic) and fiber (cardboard, news paper, and mixed paper). Approximately 453 tons of containers and 1,254 tons of fiber were collected during FY 2001-2002. Also 42.92 tons of waste oil (11,445 gallons), and 10,000 gallons of antifreeze were collected. Containers and fiber are shipped to Greenville, S.C. to a material recovery facility operate by FCR, Inc. Currently the County receives revenues on containers based on market rates and receives \$15 per ton for fiber. Shipping costs are high at \$350 per load which for containers is approximately \$50/ton and fiber \$15/ton. So at this time the recycling program does not pay for itself as does the other solid waste programs. With the free MSW disposal allowed in the recycling center the total

recycling program is costing the County approximately \$100,000 per year. Some of the private waste hauling companies also offer curbside recycling to their customers. GDS in particular is collecting approximately 6 tons per week of household recyclables. This material is being transferred to a recovery facility in Buncombe County operated by Curbside Management. Since this material is being transferred out of the County and does not come through the Henderson County facility, Henderson County is not getting credit for this volume of recyclables on State reports, but is probably been counted in Buncombe County reports.

OTHER RECYLCING PROGRAMS

The municipalities in the County run various recycling programs. These are as follows:

City of Hendersonville

Hendersonville currently contracts with Curbside Management out of Asheville to collect household recyclables including glass, plastic, metal cans & containers, mixed paper, cardboard and newsprint. During FY04-05 the City collected 593.7 tons of materials. Curbside operates their own MRF and markets their materials. There are no known plans to change this system. Current cost to operate this program is \$161/ton.

Town of Fletcher

Fletcher also contracts with Curbside Management out of Asheville to collect household recyclables including glass, plastic, metal cans & containers, and newsprint. During FY04-05 the City collected 121.7 tons of materials. Curbside operates their own MRF and markets their materials. There are no known plans to change this system. Current cost to operate this program is \$154/ton.

Town of Laurel Park

The Town of Laurel Park contracts with GDS to collect household recyclables including glass, plastic, metal containers, newsprint and magazines. GDS contracts with Curbside Management out of Asheville for processing these recyclables. During FY 04-05 GDS collected 80 tons of material. There are no known plans to change this system. Current cost to operate this program is \$153/ton.

Village of Flat Rock and Town of Mills River

The Village of Flat Rock and Town Mills River do not operate a solid waste collection programs. Flat Rock contracts the service to GDS within their jurisdiction, but each individual homeowner or business must contract direct with GDS. GDS does offer recycling services to their customers. Mills River allows individuals to contract with any waste hauling company. Recyclable material is not tracked, it is not known how much was collected in the Village of Flat Rock. This is the same situation with County customers of GDS.

Waste Hauling Companies

Some of the Waste Hauling Companies offer recycling services to their customers in the unincorporated areas of the County. GDS currently offers these services and provides collection for approximately one half the county. They currently collect approximately 6 tons per week of household recyclables through a curbside blue bag program. These recyclables do not come through the Henderson County Solid Waste Transfer Station but are hauled direct to Curbside Management in Buncombe County. GDS currently pays Curbside Management \$20/ton to process these materials plus the cost of transporting.

Solid Waste Enforcement- The County handles enforcement of its Solid Waste Ordinance with two enforcement officers. One officer works off site handling approximately 300 complaints per year. The County also uses prison labor to assist with litter control at the transfer station and along highways. The Henderson County State prison located adjacent to the Transfer Station has been closed. This has resulted in the loss of prison labor, which will affect the litter and roadside cleanup programs.

Solid Waste Collection - The collection of solid waste is performed by private haulers or municipal public works departments. The County does not provide any collection services.

Enterprise Fund - The Henderson County Solid Waste Department is funded by an Enterprise Fund. The fund receives revenue from tipping fees, sale of scrap metal, white goods tax, and tire tax. There is no revenue from the County General Fund (property taxes) provided to the enterprise fund. This being the case, the revenues are highly dependent on the Solid Waste Facility receiving sufficient solid waste, which generates revenue through the tipping fees. This does not give the County much financial incentive to promote programs that divert solid waste away from the facility. The haulers however do have an incentive to recycle in that they avoid tipping fees. One hauler, GDS, provides recycling services in addition to the County's recycling center. Most of the municipalities also offer recycling services. All of these recycling programs along with the County's white goods, wood & yard waste, and tire programs allows the County to maintain its 5% solid waste reduction goal. The State's initial waste reduction goal was 40% for 2000-2001 and 50% for 2005/2006. The 40% goal was not met and in fact the solid waste per capita is increasing. The 50% goal will also not be met. Henderson County has been fortunate to maintain a 5% reduction some of the years and will continue to strive to maintain this goal. Recent years this goal has not been met. The following is a summary of the tons disposed, population, disposal rates, percent reduction and lbs./person/day for Henderson County.

Year	Tons Disposed	Population	Per Capita Disposal Rate	Percent Reduction	Lbs./person/day
91/92	81,498	71,185	1.14		6.25
92/93	77,761	72,252	1.08	5	5.92
93/94	71,570	73,356	0.98	14	5.37
94/95	75,896	75,096	1.01	11	5.53
95/96	68,950	76,250	0.90	21	4.93
96/97	87,522	77,558	1.13	1	6.19
97/98	95,125	79,148	1.20	-5	6.58
98/99	87,636	80,562	1.09	5	5.97
99/00	94,257	81,856	1.15	0	6.46
00/01	95,443	89,173	1.07	6	5.86
01/02	97,650	91,544	1.07	6	5.84
02/03	104,249	92,988	1.12	2	6.14
03/04	116,840	94,496	1.24	-9	6.77
04/05	119,866	96,124	1.24	-9	6.83
Year	Projected Tons	Projected Population	Projected per Capita Rate	% Reduction	Projected Lbs./person/day
2012-2013	122,111	112,029	1.09	5	5.97
2015-2016	127,865	117,308	1.09	5	5.97

In summary, the Solid Waste Department continues to offer a high level of Solid Waste Services to the citizens of Henderson County. Maintaining a 5% reduction goal will be difficult due to the high growth in the County and current budget situations at both the State and local level.

WASTE REDUCTION GOAL SHEET

**N.C. LOCAL GOVERNMENT TEN YEAR
SOLID WASTE MANAGEMENT PLAN**

Local government name Henderson County

Previously established FY 2012-2013 waste reduction goal 5%

After considering your government's current and projected solid waste activities, resources, population and economic growth will the FY 2012-2013 goal change?

Yes _____ No X

If Yes, what is the revised FY 2012-2013 waste reduction goal? N/A

Establish a new FY 2015-2016 waste reduction goal 5%

WASTE REDUCTION CALCULATION

To provide 10 years of solid waste management planning, as per General Statute 130A-309.09A(b), waste reduction goals are updated. Use the following chart to determine the tonnages needed to manage, without landfilling, to meet waste reduction goals for FY 2015-2016.

CALCULATIONS	FY 2012-2013	FY 2015-2016
1. Baseline year per capita disposal rate (FY 1991-1992 unless alternate approved by Section)	1.14 tons	1.14 tons
2. Percent waste reduction goal	5	5
3. Targeted per capita disposal rate	1.09 tons	1.09 tons
4. Estimated population	112,029	117,308
5. Projected tonnage for disposal at baseline rate	127,713	133,731
6. Targeted annual tonnage for disposal	122,857	127,865
7. Targeted annual tonnage to reduce	4,856	5,866

CHECK LIST

These items and this sheet should be included in the Update to the Ten Year Comprehensive Solid Waste Management Plan submitted to the Solid Waste Section by June 30, 2006.

County or Municipality Name: Henderson County

GENERAL COMPONENTS

- Update covers 10 year time frame
- Good faith effort to achieve State's waste reduction goal
(With justification for local waste reduction goals [economics, markets, etc.])
- Comply with State comprehensive solid waste management plan
- Include a description of the process by which the update was developed
- Description of public participation process
- Copy of public meeting advertisement
- Description and assessment of the full cost of solid waste management
- Consider the use of facilities and other resources that may be available through private enterprise
- 13 *Plan of Action* sheets with descriptive assessment for each sheet
- This sheet with items checked off

SPECIFIC COMPONENTS

- Evaluation of the solid waste stream in the geographic area covered by the plan . (Includes municipal solid waste (MSW), construction and demolition (C & D) debris, land clearing and inert debris (LCID) whether the planning entity physically controls all portions or not)

GOAL

- Compare previous per capita waste reduction for FY's 2012-13 and 2015-16 and adjust as necessary
- Establish a new per capita waste reduction goal for FY 2015-16 (worksheet provided)
- Update is designed to achieve the solid waste reduction goal

PLAN OF ACTION SHEETS:

(Assessment of initial plan with current status and description of new/revised actions to achieve goals set through FY 2015-16 for each of the 13 elements below):

- Reduction at the source
- Collection
- Recycling and Reuse
- Composting and mulching
- Incineration with energy recovery
- Incineration without energy recovery
- Transfer outside the geographic area covered by the plan
- Disposal capacity
- Education with the community and through the schools
- Special waste (tires, white goods, yard waste, septage, household hazardous waste)
- Illegal disposal/litter
- Purchasing recycled products
- Disaster response

APPENDIX

A

RESOLUTIONS

RESOLUTION NO. 139

**A RESOLUTION OF THE VILLAGE COUNCIL OF THE VILLAGE OF
FLAT ROCK TO APPROVE THE 2006 HENDERSON COUNTY 10-YEAR
SOLID WASTE MANAGEMENT PLAN UPDATE**

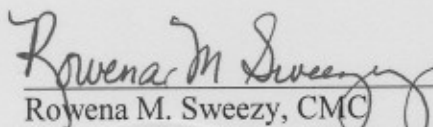
WHEREAS, better planning for solid waste will help protect the public health and the environment, provide for an improved solid waste management system, better utilize our natural resources, and control the cost of solid waste management; and

WHEREAS, North Carolina General Statutes Section 130A-309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a ten-year comprehensive Solid Waste Management Plan and to update such plan every three years; and

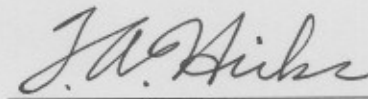
WHEREAS, the Village of Flat Rock has provided adequate opportunity for public input in the process by means of a public hearing;

NOW, THEREFORE, BE IT RESOLVED that the Village of Flat Rock hereby approves the 2006 Henderson County 10-Year Solid Waste Management Plan Update.

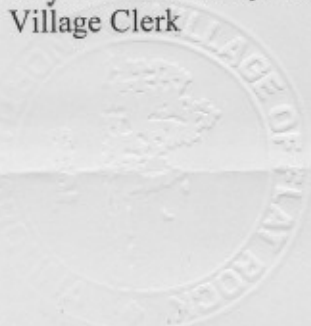
ADOPTED this the 3rd day of April 2006.



Rowena M. Sweezy, CMC
Village Clerk



Terry A. Hicks
Acting Mayor



APPROVED AND ADOPTED this 3rd day of April 2006.
at the regular meeting of the Village Council of the Village of Flat Rock, North Carolina.
Present: _____
Absent: _____

Town of Laurel Park

HENRY T. JOHNSON, Mayor
RICHARD M. JONES, Commissioner
KEITH A. MADDOX, Commissioner
and Mayor Pro Tem
DONA M. MENNELLA, Commissioner
RICHARD W. SPICKA, Commissioner

441 White Pine Drive
Laurel Park, NC 28739-0910
(828) 693-4840
FAX (828) 696-4948

JAMES W. BALL, JR., Town Manager
DONALD N. FISHER, Chief of Police
KIMBERLY B. HENSLEY, CMC, Town Clerk
J. EARL NEWMAN, Public Works
D. SAMUEL NEILL, Town Attorney

RESOLUTION TO APPROVE THE HENDERSON COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE

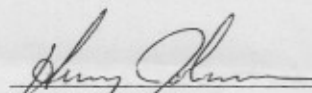
WHEREAS, better planning for solid waste will help protect public health and the environment, provide for an improved solid waste management system, better utilize our natural resources, control the cost of solid waste management; and,

WHEREAS, NC General Statute 130A-309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a 10-year comprehensive Solid Waste Management Plan and to update this plan every three years; and,

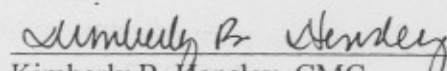
WHEREAS, the Town of Laurel Park was represented on the Henderson County Solid Waste Management Plan Advisory Committee and has been actively involved in the planning process;

NOW, THEREFORE, BE IT RESOLVED that the Town Council of the Town of Laurel Park hereby approves the Henderson County Solid Waste Management Plan Update.

Adopted this the 18th day of April 2006.


Henry T. Johnson
Mayor

ATTEST:


Kimberly B. Hensley, CMC
Town Clerk

Legals

**NOTICE OF
PUBLIC HEARING**

The Town Council of Laurel Park will hold a public hearing for consideration of an update to the Henderson County 10-Year Solid Waste Management Plan at 9:30 a.m. on April 18, 2006 in the Laurel Park Town Hall.

Kimberly B. Hensley
Town Clerk, CMC

(04575113) 4/12

APPENDIX

B

PUBLIC HEARING ADVERTISEMENT

**NOICE OF
PUBLIC HEARING**

Notice is hereby given pursuant to NCGS 130-A309.09A(b) that the Henderson County Board of Commissioners will hold a Public Hearing on May 19, 2006 at 11:00 am in the Meeting Room of the Henderson County Administration Building at 100 North King Street, Hendersonville, N.C. The purposed of the Public Hearing is to receive comments from the public on an update to the 10-year Solid Waste Management Plan. For more information concerning the proposed Plan Update contact Gary T. Tweed, P.E., County Engineer, at the Office of the County Engineer located at 802 Stoney Mountain Road, Hendersonville, N.C. 28791, or 828-698-5115. A copy of the Plan Update will be available for review from 8:00 a.m. to 5:00 p.m. Monday through Friday at the Office of the County Engineer and the Solid Waste Department both at 802 Stoney Mountain Road, Hendersonville, N.C. 28791. The public is invited to attend the Public Hearing and comment on the proposed Plan Update.

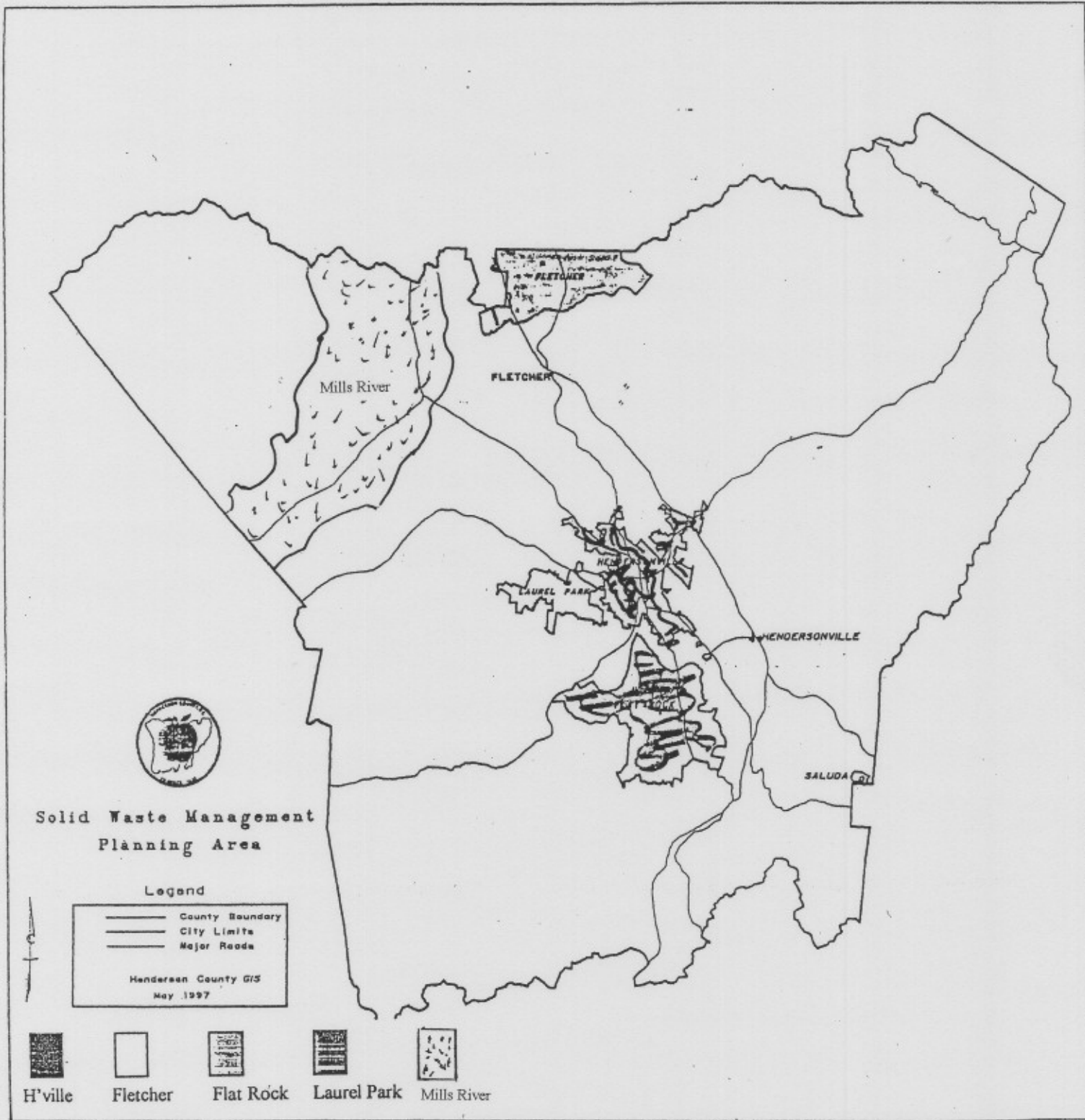
Gary T. Tweed, P.E.
County Engineer

APPENDIX

C

MAP

Map of Henderson County Planning Area



APPENDIX

D

WASTE CHARACTERIZATION

Quick Waste Stream Analysis

This analysis seeks to identify the presence of basic materials in a community's waste stream. The analysis uses waste stream factors from the North Carolina Market Assessment report and data from the 2004-05 Local Government Solid Waste Management Annual Reports. County reports include all municipal recycling tonnages (unless noted). "Local Tonnage" represents estimated generation from residential, institutional, commercial sources. The whole waste stream is not represented here. "Current recovery" reflects LG recycling efforts only and is taken from the Local Government Solid Waste Management Annual Reports; no private sector recovery is included. "Total Recovery" does not include special wastes. If a local government's recycling is performed by the county or another municipality, recovery numbers may not be accurately represented in this analysis. This sheet may contain errors due to rounding and may not include all materials recovered by a local government. It should be noted that private sector recovery in your community may be substantial.

Quick Waste Stream Analysis For: HENDERSON COUNTY					
STATISTICS				Recovery (lbs/capita):	
Community Population (7/1/04):	96,124			Ave. Municipal Recovery (lbs/capita):	109.10
Total FY 04-05 Recovery (tons):	4,297.91			Ave. County Recovery (lbs/capita)*:	111.50
				* (County recovery includes municipalities)	
Material	Local Tonnage	Current Recovery	Tons Left In Waste Stream	Percent Recovered	Average LG Recovery
Total Paper	25,931.65	477.33	25,454.32	1.8%	12.0%
Newsprint	3,518.04	375.06	3,142.98	10.7%	48.0%
Corrugated Cardboard	10,623.10	22.08	10,601.02	0.2%	9.9%
Magazines	688.21	-	688.21	0.0%	5.0%
Office Paper	2,326.66	-	2,326.66	0.0%	1.4%
Mixed Paper	8,450.74	80.19	8,370.55	0.9%	3.3%
Other Paper	324.89	-	324.89	0.0%	16.2%
Total Glass	3,478.53	260.91	3,217.62	7.5%	16.1%
Clear	1,739.27	121.65	1,617.62	7.0%	14.1%
Green	904.42	61.20	843.22	6.8%	14.5%
Amber	834.85	78.06	756.79	9.4%	22.1%
Total Plastic	5,139.60	54.70	5,084.90	1.1%	3.9%
PETE	983.78	32.82	950.96	3.3%	12.5%
HDPE	1,702.24	21.88	1,680.36	1.3%	4.7%
Other Plastic	2,453.58	-	2,453.58	0.0%	10.0%
Aluminum Cans	555.84	12.86	542.98	2.3%	10.5%
Steel Cans (Bi-Metal)	969.89	-	969.89	0.0%	8.8%
White Goods	1,438.24	-	1,438.24	0.0%	52.2%
Pallets and Wood Crates	5,574.71	-	5,574.71	0.0%	2.8%
Food Wastes	10,745.26	N/A	N/A	N/A	N/A
Textiles (post consumer)	2,316.00	-	2,316.00	0.0%	0.1%
Electronics	626.87	-	626.87	0.0%	0.4%
Commingled Tonnage	N/A	1,787.07	N/A	N/A	N/A
Other Materials Collected					
Other Metal	N/A	1,578.09	N/A	N/A	N/A
Other Wood	N/A	126.95	N/A	N/A	N/A
-	N/A	-	N/A	N/A	N/A
-	N/A	-	N/A	N/A	N/A
-	N/A	-	N/A	N/A	N/A
Special Wastes					
Used Oil (Gallons)	170,075.51	11,445.00	158,630.51	6.7%	6.0%
Used Oil Filters (# Filters)	157,494.72	-	157,494.72	0.0%	0.3%
HHW (tons)	N/A	-	N/A	N/A	N/A

APPENDIX

E

FULL COST ACCOUNTING

Part I. Full Cost Accounting

6. What were the full costs of your local government's solid waste management program? To the best of your ability, please respond in the chart below. The following information will be needed to determine your cost per household and cost per ton.

- a. Solid Waste Collection: Number of households served 47,000 EST. # IN COUNTY COLLECTION BY OTHERS
- b*. Solid Waste Disposal: Total tonnage disposed by the local government 81,975
- c. Reduction, Reuse Recycling: Number of households served by 3R program 47,000
- d*. Reduction, Reuse Recycling: Total tonnage of recyclables recovered by the local government 3372
- e. Mulching/Composting: Number of households served by the program 47,000
- f*. Mulching/Composting: Total tonnage handled by mulching/composting program 1,346

To calculate the total cost per ton in the table below, **DO NOT** add the cost per ton of the 4 program categories; the total cost of all programs should be divided by the total tonnage managed by the local government.

Equation: Total cost per ton = [(program cost 1+2+3+4) ÷ (b+d+f)]

Note: For additional assistance with this section, please contact your manager or finance director.

	1. Solid Waste Collection	2. Solid Waste Disposal**	3. Reduction, Reuse And Recycling	4. Mulching, Composting and Other Programs	Total Cost
Program Cost*		3,492,361	100,000	50,000	3,642,361
Cost per Household***		74.31	2.13	1.06	77.50
Cost per Ton		42.60	29.65	37.15	42.01

* Item is needed to calculate cost per household and/or costs per ton.
 ** Estimate either 1. Full-cost of disposal (landfill, transfer station, etc.) including applicable closure costs, or 2. The tipping fee paid by your local government to a disposal facility.
 *** If you are collecting commercial/industrial solid waste or recyclables, you do not need to complete the cost per household section.

Overall Program Cost from above (1+2+3+4) = 3,642,361

Total Tonnage Managed (b+d+f) = 86,693

7. If your local government contracts for solid waste or recycling services, please report the annual contract amount.

\$ N/A for solid waste services per year.

\$ N/A for recycling per year.

Or

\$ N/A combined contract (solid waste and recycling)

According to GS 130A-309.08, local governments are required to conduct full cost accounting annually and to develop a system to inform users of such costs.

Part I. Full Cost Accounting

6. What were the full costs of your local government's solid waste management program? To the best of your ability, please respond in the chart below. The following information will be needed to determine your cost per household and cost per ton.

- a. Solid Waste Collection: Number of households served 1089
- b*. Solid Waste Disposal: Total tonnage disposed by the local government 757
- c. Reduction, Reuse Recycling: Number of households served by 3R program 1000
- d*. Reduction, Reuse Recycling: Total tonnage of recyclables recovered by the local government 80
- e. Mulching/Composting: Number of households served by the program 1089
- f*. Mulching/Composting: Total tonnage handled by mulching/composting program 3709

To calculate the total cost per ton in the table below, **DO NOT** add the cost per ton of the 4 program categories; the total cost of all programs should be divided by the total tonnage managed by the local government.

Equation: Total cost per ton = [(program cost 1+2+3+4) ÷ (b+d+f)]

Note: For additional assistance with this section, please contact your manager or finance director.

	1. Solid Waste Collection	2. Solid Waste Disposal**	3. Reduction, Reuse And Recycling	4. Mulching, Composting and Other Programs	Total Cost
Program Cost*	79,980	36,268	12,240	33,880	162,368
Cost per Household***	73.44	33.30	12.24	31.11	150.10
Cost per Ton	105.65	47.91	153.00	9.14	35.72

* Item is needed to calculate cost per household and/or costs per ton.
 ** Estimate either 1. Full-cost of disposal (landfill, transfer station, etc.) including applicable closure costs, or 2. The tipping fee paid by your local government to a disposal facility.
 *** If you are collecting commercial/industrial solid waste or recyclables, you do not need to complete the cost per household section.

Overall Program Cost from above (1+2+3+4) = 162,368
 Total Tonnage Managed (b+d+f) = 4546

7. If your local government contracts for solid waste or recycling services, please report the annual contract amount.
- \$ 79,980 for solid waste services per year.
 - \$ 12,240 for recycling per year.
 - Or
 - \$ 92,220 combined contract (solid waste and recycling)

According to GS 130A-309.08, local governments are required to conduct full cost accounting annually and to develop a system to inform users of such costs.

Part I. Full Cost Accounting

6. What were the full costs of your local government's solid waste management program? To the best of your ability, please respond in the chart below. The following information will be needed to determine your cost per household and cost per ton.

- a. Solid Waste Collection: Number of households served 2160
- b*. Solid Waste Disposal: Total tonnage disposed by the local government 1834.34
- c. Reduction, Reuse Recycling: Number of households served by 3R program 1469
- d*. Reduction, Reuse Recycling: Total tonnage of recyclables recovered by the local government 312
- e. Mulching/Composting: Number of households served by the program 2160
- f*. Mulching/Composting: Total tonnage handled by mulching/composting program 287.60

To calculate the total cost per ton in the table below, **DO NOT** add the cost per ton of the 4 program categories; the total cost of all programs should be divided by the total tonnage managed by the local government.

Equation: Total cost per ton = [(program cost 1+2+3+4) ÷ (b+d+f)]

Note: For additional assistance with this section, please contact your manager or finance director.

	1. Solid Waste Collection	2. Solid Waste Disposal**	3. Reduction, Reuse And Recycling	4. Mulching, Composting and Other Programs	Total Cost
Program Cost*	134,211.21	80,793.27	48,142.16	INCLUDED IN SOLID WASTE	263,146.64
Cost per Household***				—	
Cost per Ton	73.17	44.04	154.30	—	108.12

* Item is needed to calculate cost per household and/or costs per ton.
 ** Estimate either 1. Full-cost of disposal (landfill, transfer station, etc.) including applicable closure costs, or 2. The tipping fee paid by your local government to a disposal facility.
 *** If you are collecting commercial/industrial solid waste or recyclables, you do not need to complete the cost per household section.

Overall Program Cost from above (1+2+3+4) = _____

Total Tonnage Managed (b+d+f) = 2433.94

7. If your local government contracts for solid waste or recycling services, please report the annual contract amount.

\$ _____ for solid waste services per year.

\$ 48,142.16 for recycling per year.

Or

\$ _____ combined contract (solid waste and recycling)

According to *GS 130A-309.08*, local governments are required to conduct full cost accounting annually and to develop a system to inform users of such costs.

Part I. Full Cost Accounting

6. What were the full costs of your local government's solid waste management program? To the best of your ability, please respond in the chart below. The following information will be needed to determine your cost per household and cost per ton.

- a. Solid Waste Collection: Number of households served 4388
- b*. Solid Waste Disposal: Total tonnage disposed by the local government 4774
- c. Reduction, Reuse Recycling: Number of households served by 3R program 4388
- d*. Reduction, Reuse Recycling: Total tonnage of recyclables recovered by the local government 602.7
- e. Mulching/Composting: Number of households served by the program 4388
- f*. Mulching/Composting: Total tonnage handled by mulching/composting program 3227

To calculate the total cost per ton in the table below, DO NOT add the cost per ton of the 4 program categories; the total cost of all programs should be divided by the total tonnage managed by the local government.

Equation: Total cost per ton = [(program cost 1+2+3+4) ÷ (b+d+f)]

Note: For additional assistance with this section, please contact your manager or finance director.

	1. Solid Waste Collection	2. Solid Waste Disposal**	3. Reduction, Reuse And Recycling	4. Mulching, Composting and Other Programs	Total Cost
Program Cost*	\$349,807.88	\$228,704.12	\$97,260.82	\$114,275	\$790,047.82
Cost per Household***	\$79.72	\$52.12	\$22.17	\$26.04	\$180.05
Cost per Ton	\$40.65	\$26.58	\$11.30	\$13.28	\$ 91.82

* Item is needed to calculate cost per household and/or costs per ton.

** Estimate either 1. Full-cost of disposal (landfill, transfer station, etc.) including applicable closure costs, or 2. The tipping fee paid by your local government to a disposal facility.

*** If you are collecting commercial/industrial solid waste or recyclables, you do not need to complete the cost per household section.

Overall Program Cost from above (1+2+3+4) = \$790,047.82

Total Tonnage Managed (b+d+f) = 8603.7

7. If your local government contracts for solid waste or recycling services, please report the annual contract amount.

\$ - for solid waste services per year.

\$ \$146,000 for recycling per year.

Or

\$ - combined contract (solid waste and recycling)

According to GS 130A-309.08, local governments are required to conduct full cost accounting annually and to develop a system to inform users of such costs.

APPENDIX

F

**PLANNING ELEMENT SHEETS &
NARRATIVE**

“PLAN OF ACTION SHEET” NARRATIVE

Source Reduction

The Henderson County Solid Waste Department continues the support of use of compost bins, but no longer purchases bins for resale. Citizens wishing to buy compost bins are advised as to locations where bins can be purchased. Handouts are available at the Solid Waste Department and upon request by mail for various solid waste programs.

The Waste Reduction Partners Program (WRAPP) continues which is a group of volunteers who are available to educate business and industry on the possibilities and benefits of source reduction and to encourage them to join federal and state level source reduction programs. These include WasteWise and ClimateWise. The WRAPP volunteers offer on site waste assessments to assist business in reducing the amount of waste they generate.

Henderson County continues to support the Christmas Tree Recycling Program currently conducted each year at the County's Jackson Park.

Collection

The County does not provide collection services. Collection is provided by private companies and municipal public works departments. There are currently 31-permitted solid waste collection services in Henderson County.

Recycling/Reuse

The County has one drop-off recycling center located at the Solid Waste Transfer Station. The County collects cardboard, all fiber products (newspaper, mixed paper, magazines, etc.) and containers (Plastic bottles, glass, tin and aluminum cans). These materials are shipped to a Materials Recovery Facility in Greenville, S.C. The Henderson County Solid Waste Advisory Committee is currently reviewing the recycling programs in the County and will be making recommendations for improvements to the County Board of Commissioners. It is expected that this review will be conducted throughout 2006 with a report to the Board by July 2007.

Most of the municipalities offer curbside recycling services. These are provided by contract and can vary from year to year.

The Henderson County Solid Waste Department continues the collection and reuse of Wood and Yard Waste, Scrap Metal and White Goods, and Used Tires.

Citizens are encouraged to continue the use of local thrift stores for donation and reuse of materials.

Composting and Mulching

The Henderson County Solid Waste Department continues the grinding of wood and yard waste into mulch. This is conducted by contract and currently the contractor removes the mulch that is reused as landscape mulch or for boiler fuels. There are no plans to start any type of composting operation.

Incineration With or Without Energy Recovery

These programs are not being considered by Henderson County. The County does recover through a contract with Enerdyne, Inc. the landfill gas. The landfill gas is collected and piped to a boiler where steam is produce for resale to industry. This project has been quite successful and is recovering a valuable resource.

Transfer of Solid Waste Outside Geographic Area

The Henderson County Solid Waste Department will continue the transfer of Municipal Solid Waste (MSW) for the foreseeable future. The MSW is transferred to the Waste Management Palmetto Landfill in Welford, S.C. Current contract runs through 2010 and Waste Management has indicated that this facility can serve Henderson County for the next ten years.

Henderson County operates its own Construction and Demolition Landfill. This landfill located also at the Solid Waste Transfer Station site should operate for approximately 1 to 2more years. At that time the County may pursue expansion of this facility, possible relocation to a new site, or begin the transfer of C&D material along with the MSW to a private landfill.

Education with Community and Through the Schools

The County continues to offer various educational programs. The Cooperative Extension Office has staff, trained in solid waste management, available for community education. The County continues to offer tours to school and civic groups of the solid waste facilities and recycling center. The County Engineer periodically teaches classes on Solid Waste Management at the local community college. In cooperation with the Land of Sky Regional Council, Henderson County help sponsor the construction of a Mobile Environmental Learning Center (MELC) which is available to schools and other civic groups. The MELC provides information on Solid Waste Management, Recycling, Composting, etc.

Special Waste

The Henderson County Solid Waste Department continues to collect tires, scrap metal, white goods, used motor oil, and anti-freeze at no charge. Retailers accept lead-acid batteries. Nickel-cadmium batteries are accepted at Radio Shack and Circuit City. Used paint can be solidified by opening cans and mixing with kitty litter or sand and paint allowed to harden. Once hardened the paint can be disposed of along with other MSW. The Solid Waste Advisory Committee is reviewing current household hazardous waste disposal and will be making recommendations for changes or improvements to the system.

Illegal Disposal and Management of Litter

The Henderson County Solid Waste Department has two solid waste enforcement officers. One works on site to regulate haulers. The second officer works on and off site investigating complaints, illegal dumping, etc. The County receives some 300 complaint calls per year. On site litter is managed by staff and by use of prison labor. Prison labor is used to help with roadside cleanups of illegal dumps. The N.C. Department of Transportation continues to use its Adopt a Highway Program. Other civic groups as the Environmental Conservation Organization offer programs that assist with litter and other solid waste problem areas. The County Board of Commissioners has appointed an Environmental Advisory Committee that has established in the past litter hotline programs.

Purchasing Recycled Products

The County continues the purchase of recycled paper products off the state contract.

Disaster Response

Interim storage of any disaster related materials would be stored at the Henderson County Solid Waste Facility on Stoney Mountain Road until it can be processed. Past experience with wind and ice storms has demonstrated that the existing facility has sufficient grounds to store materials. Should future disaster events require additional areas, and the County has access to parks and other vacant tracts including school properties that can be used for temporary storage of materials until materials can be transfer to the Solid Waste Facility. Contacts for disaster response are:

County Engineer – Gary T. Tweed, P.E.
828-698-5115 Solid Waste Office 828-697-4505

Fire Marshall, Emergency Response - Rocky Hyder
828-697-4728

PLANNING ELEMENTS
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN
PLANNING YEARS 2006 through 2016

Element- REDUCTION

ACTIONS BASED ON 10 YR PLAN		COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW OR REVISED ACTIONS	
KEY ACTIONS	DATE DUE		COMPLETION DATE	KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE
WRAPP Presentation To Chamber of Commerce	96/97	Presentation made	96/97				
Enviro Shopping Presentation	97/98			Enviro Shopping Presentation	Lack of Interest	No program planned	
Consider commercial/ Industrial source reduction workshop	97/98			Consider commercial/ Industrial source reduction workshop	WRAPP program to assist in this sector of waste stream	On-going	
Compost bins						Information made available as to where bins can be purchased	
Solid Waste Advisory Committee Report to BOC on improvements to recycling and other programs	2007						

PLANNING ELEMENTS
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN
PLANNING YEARS 2006 through 2016

Element- RECYCLING & REUSE

ACTIONS BASED ON 10 YR PLAN		COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW OR REVISED ACTIONS	
KEY ACTIONS	DATE DUE		COMPLETION DATE	KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE
Research curbside recycling	96/97	Presented proposal to the Board of Commissioners	96/97				
Curbside recycling to begin	97/98			Curbside recycling to begin	Franchise of waste haulers not approved	No new programs planned	
Grant applied for sharing shed	96/97	Grant awarded sharing shed opened	96/97			Sharing shed was closed due to inadequate staff to monitor facility	
Solid Waste Advisory Committee Report to BOC on improvements to recycling and other programs	2007						
Electronics Recycling event	2006	Event held	2006				

PLANNING ELEMENTS
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN
PLANNING YEARS 2006 through 2016

Element- COMPOSTING & MLUCHING

ACTIONS BASED ON 10 YR PLAN		COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW OR REVISED ACTIONS	
KEY ACTIONS	DATE DUE		COMPLETION DATE	KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE
Wood and Yard Waste grinding to continue	On going						
Research MSW compost project	96/97			Research MSW compost project	Budget constraints	No new program planned	
Begin school cafeteria compost program	97/98			Begin school cafeteria compost program	Staff reassigned to other assignments	No new program planned	

PLANNING ELEMENTS
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN
PLANNING YEARS 2006 through 2016

Element- INCENERATION with energy recover

ACTIONS BASED ON 10 YR PLAN		COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW OR REVISED ACTIONS	
KEY ACTIONS	DATE DUE		COMPLETION DATE	KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE
Not being considered							

PLANNING ELEMENTS
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN
PLANNING YEARS 2006 through 2016

Element- **INCINERATION without energy recovery**

ACTIONS BASED ON 10 YR PLAN		COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW OR REVISED ACTIONS	
KEY ACTIONS	DATE DUE		COMPLETION DATE	KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE
Not being considered							

PLANNING ELEMENTS
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN
PLANNING YEARS 2006 through 2016

Element- TRANSFER OUTSIDE GEOGRAPHIC AREA

ACTIONS BASED ON 10 YR PLAN		COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW OR REVISED ACTIONS	
KEY ACTIONS	DATE DUE		COMPLETION DATE	KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE
Begin Transfer Station Operation	1998	Construction Completed	1998			On going. County will continue use of transfer station indefinitely.	
Renegotiate Contract for Hauling & Disposal	2006	Contract executed with Waste Management through 2010	2006				

PLANNING ELEMENTS
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN
PLANNING YEARS 2006 through 2016

Element- DISPOSAL

ACTIONS BASED ON 10 YR PLAN		COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW OR REVISED ACTIONS	
KEY ACTIONS	DATE DUE		COMPLETION DATE	KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE
Plan to continue to transfer MSW to private landfill							

PLANNING ELEMENTS
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN
PLANNING YEARS 2006 through 2016

Element- SPECIAL WASTE

ACTIONS BASED ON 10 YR PLAN		COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW OR REVISED ACTIONS	
KEY ACTIONS	DATE DUE		COMPLETION DATE	KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE
White goods to be handled by contract		On going					
Tires to be handled by contract		On going					
Nickel-Cadmium batteries accepted at Radio Shack and Circuit City		On going					
Used motor oil/antifreeze accepted at recycling center		On going					
Lead-acid batteries will be accepted by retailers		On going					
SWAC to review Household Hazardous Waste Programs		2007					

PLANNING ELEMENTS
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN
PLANNING YEARS 2006 through 2016

Element- ILLEGAL DISPOSAL & LITTER

ACTIONS BASED ON 10 YR PLAN		COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW OR REVISED ACTIONS	
KEY ACTIONS	DATE DUE		COMPLETION DATE	KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE
Continue current litter program utilizing prison labor	96/97	On going				Henderson County prison closed, arrangements made to use labor from Buncombe County Correctional facility	
Clean NC 2000 Coordinator appointed to oversee litter projects in County	2000	Coordinator appointed	2000			Program discontinued at end of project	
Litter Hotline	2000	Litter Hotline established	2000			Program discontinued at end of project	
Public education increased through advertising	2000	Advertising conducted	2000			Program discontinued at end of project	
Adopt-A-Block Litter Program	2000	Conducted	2000			Program discontinued at end of project	
Litter Summit	2003	May 8, 2003	May 8, 2003			One Time Meeting	

PLANNING ELEMENTS
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN
PLANNING YEARS 2006 through 2016

Element- PURCHASING RECYCLED PRODUCTS

ACTIONS BASED ON 10 YR PLAN		COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW OR REVISED ACTIONS	
KEY ACTIONS	DATE DUE		COMPLETION DATE	KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE
Continue Current Program			On going				

PLANNING ELEMENTS
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN
PLANNING YEARS 2006 through 2016

Element- DISASTER RESPONSE

ACTIONS BASED ON 10 YR PLAN		COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW OR REVISED ACTIONS	
KEY ACTIONS	DATE DUE		COMPLETION DATE	KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE
Interim storage of materials at County Solid Waste Facility, County Parks, and other County Property as needed							

APPENDIX

G

**SOLID WASTE ORDINANCE
SUPPORTING DOCUMENTS**

Chapter 165: SOLID WASTE

[HISTORY: Adopted by the Board of Commissioners of Henderson County as indicated in article histories. Amendments noted where applicable.]

GENERAL REFERENCES

Abandoned or junk vehicles — See Ch. 183.

Junkyards and vehicle graveyards — See Ch. A602.

ARTICLE I Incinerators [Adopted 10-23-1991]

§ 165-1. Title and jurisdiction. [Amended 8-20-2003]

This article shall be known and may be cited as the "Henderson County Ordinance for the Regulation of Incineration Facilities." This article shall apply to all unincorporated areas of Henderson County and to those incorporated areas of any city or town specifically requesting its enforcement by Henderson County upon the consent of the Henderson County Board of Commissioners. (In making such a request, the city or town must comply with the requirements of N.C.G.S. 153A-122.)

§ 165-2. Purpose.

The purpose of this article is to:

- A. Regulate the location, operation and management (including the storage, transfer, treatment and disposal of waste and by-products) of incineration facilities with a total incineration capacity greater than 250 pounds per hour.
- B. Assure that competent management, environmental and safety practices are used in waste incineration.
- C. Assure that the operation of such facilities in Henderson County poses no unreasonable threat to the water, land and air resources of Henderson County.
- D. Assure that all by-products of incineration, including fly ash, bottom ash and plant emissions, are in compliance with the quantitative limits for materials as specified in the North Carolina Administrative Code, Title 15A.

§ 165-3. Permit application.

- A. Any person, corporation or other entity desiring to operate an incinerator in Henderson County shall prepare and file an incineration permit application with the County Commissioners. Such permit application shall include all documents submitted to the United States of America, or any department or agency of the government thereof, and to the State of North Carolina regarding such incinerator, which such entity desires to operate in Henderson County.
- B. For the purpose of this article, the term "incinerator" is defined as any combustion device that burns more than 250 pounds per hour of any fuel other than the classical boiler fossil fuels, such as natural gas, coal or fuel oil. This definition does not apply to afterburners, flares, fume incinerators and other similar devices used to reduce process emissions of air pollutants.
- C. Any permit issued hereunder shall not be transferable to any other entity without approval of the Henderson County Board of Commissioners.
- D. The application shall contain the following information and declarations:
 - (1) A complete and full description of the entity desiring to operate such incinerator, including, but not be limited to, the following: information on its financial status and a detailed history of all of the applicant's past activities in the field of incineration, including a synopsis of every other facility it has built or operated. Such synopsis shall include a detailed account of any citations received by the applicant, including a copy thereof, as well as a detailed accounting of all past and pending litigation, regardless of its outcome, including copies of all documents included in any court file, and any claims

made against the applicant. The application shall include the same information as listed herein for any subsidiary or other entity in which the applicant has an ownership interest of at least 5% of the applicant.

- (2) The applicant shall submit copies of policies or an irrevocable commitment to insure as evidence of insurance for any liability incurred by the applicant in the operation of the incinerator upon the grant of a license hereunder. The policy of insurance (or commitment to insure) shall be an occurrence-based policy and shall require an annual payment of premium. Such policy (or commitment to insure) shall have a minimum limit of liability in the amount of \$10,000,000. Insurance coverage or performance bonding at the operator's expense must be provided after any potential permanent shutdown with a minimum five-year coverage suggested.
- (3) A statement of the anticipated benefits, both to the applicant and Henderson County, which will result from the project.
- (4) A description of the scope of the proposed project, including an estimated schedule of how much and what kinds of waste the facility would accept, where the waste would come from, what pretreatment and separation will be required of wastes unacceptable to the facility without such pretreatment or separation and how long the facility is expected to operate. This description shall also include a detailed statement of the proposed on-site storage facilities for materials to be incinerated.
- (5) A statement of anticipated annual site operation expenses and an estimate of such expenses for the lifetime of the project.
- (6) A statement of the proposed method of financing the project, from development through operation and closure stages, including a list of all sources of financing, including their names, addresses and the extent and type of each source's commitment.
- (7) A statement of qualifications of all management personnel to be employed at the site and the proposed number and job descriptions of all employees at the site, including information on the training and experience required for each position and safety precautions undertaken for the protection of personnel.
- (8) The anticipated date to begin construction.
- (9) The anticipated date to begin operation.
- (10) A detailed estimate of the types and amounts of local government services required by the operation in each year.
- (11) A description of emergency procedures and safety precautions that will be in use at this facility. This description should include details on emergency assistance and emergency medical treatment that could be required from County medical facilities, the Henderson County Rescue Squad and County Fire Departments.
- (12) A statement of approval of preliminary or final plans for the proposed facility by any state or federal agencies having review authority, by any fire department or departments who would respond to an emergency at such site, by the Henderson County Rescue Squad, the Henderson County Department of Emergency Medical Service, the Henderson County Sheriff's Office and the Henderson County Inspection Department. **[Amended 11-18-1998]**
- (13) A statement by the applicant agreeing to pay all costs of providing any special equipment or training required by County emergency services (such as but not limited to hazardous environmental protective fire suits) required as a result of the construction or operation of the incinerator.
- (14) A description of the environmental protection measures to be taken by the applicant to prevent contamination in and around the facility, the plant site and the County.
- (15) A detailed description of planned monitoring systems for emissions or by-products of the incinerator. Such description should include a statement of the specific chemical compounds and elements to be monitored and the instrumentation for such monitoring and that such instrumentation meets the minimum operating standards described in North Carolina Air Quality Regulations, Title 15A of the North Carolina Administrative Code.
- (16) A statement of the maximum expected start-up and shutdown times.

- (17) A description of environmental protection measures to be used during transportation of materials to and from the facility, with an estimated annual budget for these arrangements and an estimate of the volume of material to be transported during each year of operation.
 - (18) A detailed description of the site closure plan for the facility and the anticipated date of closure.
 - (19) The plan for post-closure care, including site decontamination.
 - (20) A sworn statement that the applicant declares that it has examined the application and all attachments and that to the best of the applicant's knowledge and belief all information contained therein is correct and complete.
- E. Maps of the proposed site (including any property upon which the incinerator, or any other activity connected with the incinerator, is to be located or conducted) and other written material attached to the application shall be provided which shall include, but is not limited to, the following information:
- (1) Ownership:
 - (a) The name and address of the owner and/or agent of the property upon which the incinerator, or any other activity connected with the incinerator, is to be located. **[Amended 11-18-1998]**
 - (b) Description of any existing rights-of-way or easements affecting the property upon which the incinerator, or any other activity connected with the incinerator, is to be located.
 - (c) A certified copy of all restrictive covenants affecting the property upon which the incinerator, or any other activity connected with the incinerator, is to be located.
 - (2) Description. Location of property by Tax Map property identification number and the legal description of the property. This description should include a reference to the deed book and page or other evidence of title of the current property owner.
 - (3) Features. Each map shall contain the following:
 - (a) Drawn to a scale of not less than 200 feet to the inch.
 - (b) Location sketch map showing relationship of the project to the surrounding area.
 - (c) Graphic scale, date, North arrow and legend.
 - (d) Location of the property represented by the map with respect to surrounding property and roads and the names and addresses of adjacent property owners according to County tax records.
 - (e) Zoning classification of the proposed project and adjacent property.
 - (f) The location of all boundary lines of the property as surveyed.
 - (g) The total acreage of land in the project.
 - (h) The location of existing and/or platted streets, easements, buildings, railroads, cemeteries, bridges, sewer lines, waterlines, culverts, wells and gas and electric transmission lines.
 - (i) The location of all water bodies, water courses, groundwater aquifers, springs and other pertinent features evident from a visual inspection of the property.
 - (j) The location, dimensions and acreage of all property proposed to be set aside for various uses on the applicant's property, together with a statement of each use for each area.
 - (k) The location of all test wells and/or borings.
 - (l) The location of the one-hundred-year floodplain and any existing records of flood, including inundation due to dam break.
 - (m) The location of any historic properties and grave sites on the property represented by the map, including any plans for relocation of graves and properties having historical significance.
 - (4) Geological map. A map showing the location of faults, dikes, sills and other pertinent geologic features, including, but not limited to, the following: bedrock type and strike and dip of any mappable bedding; the depth and degree of weathering (saprolite); identification and location of clay as to thickness, type and permeability; and location of the water table as to approximate depth, gradient and surface configuration.

- (5) Topographic map. A topographic map with contours at vertical intervals of not more than five feet at the same scale as the project site map. Date, method of preparation and preparer of said map shall be stated on such map.
 - (6) Transportation route map. A map showing proposed transportation routes to and from the facility site for materials to be incinerated, including the location of towns and emergency and safety facilities. Such map shall include an estimate of the volume of material to travel on each route.
- F. The application shall state the applicant's plans for dealing with the following factors with regard to, but not limited to, on-site storage and/or disposal:
- (1) Contaminant flow to water table, including leachate monitoring, collecting and withdrawal systems, clay and synthetic liners (extra thickness, multiple liners), spill prevention and containment measures.
 - (2) Contaminant movement with groundwater, including groundwater monitoring systems at the site and in a potentially affected area; subsurface slurry wall barriers control and other groundwater withdrawals in the area.
 - (3) Predictability of contaminate movement, based on preconstructed boring and groundwater modeling.
 - (4) Potential surface water effects: planned exclusion systems for surface water run-on; planned collection systems for surface water runoff, including wash water used in the cleaning process and in transport equipment and areas.
 - (5) Potential effect on aquifers; planned provisions for alternate water supply systems and facilities for immediate pumping and treatment of contaminated water.
 - (6) Potential effect on public water supply; planned runoff collection and treatment and provisions for alternate supply systems.
 - (7) Possibility of site flooding; planned special facility design, special control dikes and buffer zone setback in area of standard project flood area.
 - (8) Potential human exposure to treated wastewater, including planned safety procedures, clothing, instruction and practice for employees; planned oversized or redundant treatment capacity, effluent monitoring and automatic shutdown systems.
 - (9) With respect to incineration, the nature and predictability of pollution movement, including planned height for stacks with continuous stack and plume monitoring instrumentation.
 - (10) Detailed description of plans to segregate incompatible wastes.
 - (11) The applicant's plan for ensuring the exclusion from the incinerator of the following incinerator feedstocks:
 - (a) All waste materials classified by the United States of America (or any department or agency of its government) or the State of North Carolina as hazardous or toxic or radioactive.
 - (b) Medical waste.
 - (c) Any other waste type or category designated as excluded by the County Commissioners and any materials determined to be toxic or hazardous subsequent to the granting of a permit.
- G. The applicant shall submit a plan to ensure that process data is monitored and recorded. Such data will be delivered to the responsible person or persons as designated by the Henderson County Board of Commissioners on the first business day of each week for review and permanent storage.
- H. The above listed application information shall be assembled, indexed, bound and labeled. Ten copies shall be prepared for review by the County. Any items not submitted shall be identified along with an explanation of why that item was omitted or when information would be forthcoming.

§ 165-4. Fees.

A.

The application shall be accompanied by an initial permit application fee in the amount of \$10,000. The County shall then determine whether any additional application fee will be necessary and notify the applicant. The maximum application fee shall be \$150,000. The amount of the additional application fee, if any, shall be the amount the County anticipates that will be necessary to reimburse the County as stated

below. Any additional fee required hereunder shall be paid by the applicant to the County within 45 days of notification of the amount of such fee by the County. All application fees shall be held by the County in trust.

- (1) Such fees shall be drawn upon by the County to reimburse the County for the costs of any professional assistance that the County in its sole discretion determines that it requires to evaluate the permit application and amendments, verify its contents and evaluate the impact of the proposal on the community, public health and environment, and any other costs incurred by the County in processing the application.
 - (2) Any funds not expended by the County in the review of the permit application shall be returned to the applicant at the time of the final decision as to whether or not to issue the permit.
- B. No action will be taken by the County officials or Boards until the funds for the application fee have been remitted by the applicant to the County and payment has cleared the banks and the funds have been posted to the trust account as stated above.

§ 165-5. Review of application; issuance of permit; construction deadlines.

- A. The applicant shall submit to the Board of County Commissioners 10 copies of all information required by federal and state agencies for the proposed facility. The review procedure shall not begin nor shall the application be designated as complete until such time as all required data are submitted and the appropriate fees are paid.
- B. Upon submission of the completed application and the payment of the application fee, the Board of Commissioners shall have 30 days in which to determine if the application is complete and shall mail notice of its determination to the applicant. If it is not complete, the applicant will have 30 days to complete the application unless an extension for cause is granted by the Board of County Commissioners; after 30 days, the County may return the uncompleted application and accompanying fees to the applicant.
- C. Each application shall be reviewed by the County staff and/or by such consultant or designated Board as determined by the Board of Commissioners. Such analysis shall be made within 90 days of receipt of a completed application, unless an extension is warranted and granted by the Board of County Commissioners. Upon completion of the analysis, a report shall be made at the next regular meeting of the County Commissioners.
- D. Within 45 days from the date the report is presented, the Commissioners shall hold a public hearing for comment on the proposed permit along with the analysis of County staff and consultants. The purpose of such hearing shall be for public comment on the proposed facility. Within 15 days prior to the hearing, notice of the time and place of the hearing shall be sent to all adjacent property owners of the proposed site. Notice shall also be published in a newspaper of local circulation. If the date of the hearing does not coincide with a regular evening meeting, then another evening hearing date shall be set. **[Amended 11-18-1998]**
- E. Within 60 days of the hearing, the Board of County Commissioners shall make its decision to grant the permit, deny it or grant it with specified conditions. In making such determination, the Board of Commissioners shall determine:
 - (1) That the construction and operation of the facility will not pose an unreasonable risk to the health and welfare of Henderson County or to site operating personnel.
 - (2) That the applicant or facility operation has the capability and financial resources to construct, operate and maintain the facility.
 - (3) That the applicant or operator has taken or consented in writing to take any and all reasonable measures to comply with applicable federal, state and local regulations and ordinances.
 - (4) That the applicant's plan represents an adequate method, based upon accepted technology, for handling the waste for which the applicant will be permitted and that it appears the applicant has demonstrated that it will provide competent management, and the best safety practices will be employed in handling the waste at the proposed facility.
- F. The applicant has 18 months from the date of issuance of a permit to begin construction and 24 months from the beginning of construction to complete the facility and bring it on line. Extensions to these requirements may be granted by the Board of County Commissioners for cause.

§ 165-6. Privilege license tax.

A privilege license tax, in an amount to be set annually by the Commissioners, will be required and paid annually in conformity with N.C.G.S. 153A-152.1. The privilege license tax will be in direct proportion to the costs incurred by Henderson County to monitor the facility to ensure compliance with the regulations contained herein and the amount necessary to prepare Henderson County to respond to emergencies which may result from any emergency caused by the facility.

§ 165-7. Emissions.

Emissions from all incinerators subject to regulation hereunder shall not exceed the most restrictive provisions of the Toxic Air Pollutant Guidelines as given in the most current North Carolina Administrative Code, Title 15A, or its subsequent equivalent documents.

§ 165-8. Enforcement; violations and penalties. [Amended 11-18-1998]

Pursuant to the power vested in the County by N.C.G.S. 153A-123, the County, through its responsible officers, shall enforce the provisions of this article to ensure and safeguard the public health, safety and welfare. Violations of this article shall be subject to the penalties provided in Chapter 1, General Provisions, Article II, except that the civil penalty for violations of this article shall be \$5,000.

ARTICLE II Collection and Recycling [Adopted 2-17-1993, amended 7-6-1993; 11-17-1993]**§ 165-9. Purpose; statutory authority; jurisdiction.**

- A. The purpose of this article is to protect human health and the environment by regulating the storage, collection, transportation and disposal of solid waste in Henderson County, to provide environmentally sound, cost-efficient solid waste disposal and to provide for the safe operations at the County facility. **[Amended 12-17-1997]**
- B. This article is adopted under the authority of N.C.G.S. 153A-121, 153A-132.1, 153A-136, 153A-274 through 153A-278 and 153A-291 through 153A-293 and 130A-309.09A, 130A-309.09B, 130A-309.09C and 130A-309.09D. **[Amended 11-18-1998]**
- C. Unless otherwise indicated, the ordinance applies to publicly owned municipal solid waste management facilities located in Henderson County and to all unincorporated areas of the County. Additionally, this article shall apply to those incorporated areas of any city or town specifically requesting its enforcement by Henderson County upon the consent of the Henderson County Board of Commissioners. (In making such a request, the city or town must comply with the requirements of N.C.G.S. 153A-122.) **[Amended 8-20-2003]**

§ 165-10. Administration and enforcement.

The Henderson County Board of Commissioners shall administer, interpret and enforce the provisions of this article by and through the Solid Waste Director or his representatives. For the purpose of this article, "representative" shall mean any employee within the Solid Waste Department unless otherwise designated by this article.

§ 165-11. Title.

This article shall be known and be cited as the "Henderson County Solid Waste Ordinance."

§ 165-12. Word usage and definitions.

- A. For purposes of this article, the following terms, phrases, words and their derivatives shall have the meanings given herein. When not consistent with the context, words used in the present tense include the future tense; words used in the plural include the singular, and words in the singular include the plural. The

word "shall" is always mandatory and not merely directive.

B. The following definitions shall apply in the interpretation and enforcement:

BOARD — The Board of Commissioners of Henderson County, North Carolina.

BULKY WASTE — Large items of solid waste, such as white goods, furniture (excluding cushions), large auto parts, trees, large blocks of concrete and asphalt, stumps and other oversize waste whose large size precludes or complicates their handling by normal solid waste collection, processing or disposal methods.

CIVIL PENALTY — A monetary fine assessed according to a schedule adopted by the Henderson County Solid Waste Department due to a violation of this article.

COLLECTOR — Any person who picks up or hauls solid waste or recyclable materials for a fee.

COMMERCIAL ESTABLISHMENT — Any retail, wholesale, institutional, religious, governmental, service establishment or other nonresidential establishment which may generate garbage, litter or other solid waste.

COMMISSION — The Environmental Management Commission.

COMPOSTING — The controlled decomposition of organic waste by naturally occurring bacteria, yielding a stable, humus-like, pathogen-free final product.

CONSTRUCTION or DEMOLITION — When used in connection with waste or debris, means solid waste resulting solely from construction, remodeling, repair or demolition operations on pavement, buildings or other structures.

CORRUGATED CARDBOARD — Unwaxed paper boxes and other thick layered brown paper, formed with grooves and ridges, used in shipping or in which shipped goods are received.

COUNTY — Henderson County.

COVERED — Encased by a tarpaulin, camper cover, metal cover, rigid cover, plastic, canvas or other suitable material, which is secured to prevent spillage, leakage or materials from blowing from the vehicle. Solid waste in plastic bags shall not be considered covered.

DEPARTMENT — The North Carolina Department of Environment, Health and Natural Resources.

DWELLING — Any residential unit housed in a building used for residential purposes or manufactured homes or a structure used for residential purposes on any property.

EPA — The United States Environmental Protection Agency.

FACILITY — Solid waste management facility, including the landfill, transfer station, recycling center, wood waste mulching area and other designated areas located at 802 Stoney Mountain Road. **[Added 12-17-1997]**

GARBAGE — All putrescible wastes, including animal offal and carcasses, and recognizable industrial by-products, but excluding sewage and human waste.

HAULER — Any person, permitted or not, who collects and transports refuse or other solid wastes or recyclable materials on public or private streets in Henderson County.

HAZARDOUS REFUSE — Includes any rusted, jagged appliances or machinery, specifically, iceboxes and refrigerators, whose doors have not been properly dismantled, or which has been determined by the Solid Waste Director to constitute a health or safety hazard.

HAZARDOUS WASTE

- (1) A solid waste or combination of solid wastes which, because of its quantity, concentration or physical, chemical or infectious characteristics, may cause or significantly contribute to an increase in mortality or increase in serious irreversible or incapacitating reversible illness or pose a substantial problem or potential hazard to human health or the environment if improperly treated, stored, transported or disposed of or otherwise managed.

- (2) Any substance classified as a hazardous waste by the EPA.

INDIVIDUAL — Any person, organization, business or other entity generally capable of owning real estate.

INDUSTRIAL WASTE — All waste, including garbage, solids, semisolids, sludges and liquids created or

generated by factories, processing plants or other manufacturing enterprises.

MICROBIOLOGICAL WASTE — Cultures and stocks of infectious agents, including but not limited to specimens from medical, pathological, pharmaceutical, research, commercial and industrial laboratories.

MIXED PAPER — Envelopes, catalogs, bulk mail, magazines, computer paper, copy paper, file folders, phone books, gray cartons, adding machine tapes, letters, scratch pads, soft-covered books and other material as defined by the Recycling Center Manager.

OPEN BURNING — Any fire whose products of combustion are emitted directly into the outdoor atmosphere without passing through a stack or chimney, approved incinerator or other similar device.

OPEN DUMP — The consolidation or collection of solid waste from one or more sources at a disposal site which has unsanitary conditions, insignificant or no cover or insignificant or no management. This term shall include any disposal area which has not been approved by the Department.

PATHOLOGICAL WASTE — Human tissues, organs and body parts and the carcasses and body parts of all animals that were known to have been exposed to pathogens that are potentially dangerous to humans during research, were used in the production of biologicals or in vivo testing of pharmaceuticals or that died with a known or suspected disease transmissible to humans.

PERMIT — Written authorization from the Solid Waste Director to haul solid waste or recyclable material in Henderson County for hire or compensation.

PERMITTED HAULER — Any solid waste or recyclable material hauler authorized by the Solid Waste Director to transport refuse, solid waste or recyclable material for hire or compensation.

PERSON — Any individual, firm, organization, partnership, corporation, company or unincorporated association.

PUTRESCIBLE WASTE — Solid waste capable of being decomposed by microorganisms with sufficient rapidity as to cause nuisance from odors and gases, such as kitchen wastes, offal and carcasses.

RADIOACTIVE MATERIAL — Any material which emits ionizing radiation spontaneously.

RECYCLE, RECYCLABLES or RECYCLABLE MATERIAL — Those materials or that process by which solid waste, or materials which would otherwise become solid waste, are collected, separated or processed and reused or returned to use in the form of raw materials or products.

REFUSE — All nonputrescible waste.

REFUSE RECEPTACLE or RECEPTACLE — A metal or plastic container or other material approved by the Solid Waste Director.

REGULATED MEDICAL WASTE — Blood and body fluids in individual containers in volumes greater than 20 milliliters, microbiological waste and pathological waste that have not been treated.

RUBBISH — Solid or liquid waste from residences, commercial establishments or institutions.

SHARPS — Needles, syringes with attached needles, capillary tubes, slides and cover slips, scalpel blades, test tubes and blood collection tubes.

SOLID WASTE — Any hazardous or nonhazardous garbage or other refuse, rubbish, litter, trash, tires and other discarded solid materials and solid or semisolid waste materials resulting from industrial, commercial and agricultural operations and from community activities, but does not include solids or dissolved materials in domestic sewage or other significant pollutants in water resources, such as silt, dissolved or suspended solids in industrial wastewater effluent, dissolved materials in irrigation return flows or other common water pollutants. As used herein, "solid waste" shall refer collectively to any or all of the aforementioned waste materials, unless otherwise specified.

TRANSFER STATION — A permanent structure with mechanical equipment used for the collection or compaction of solid waste prior to the transportation of solid waste for final disposal. **[Added 12-17-1997]**

UNSANITARY ACCUMULATION — Any amount of solid waste which is odoriferous, pestiferous or otherwise threatening to human health as determined by the Solid Waste Department.

USED MOTOR OIL — Any oil that has been refined from crude oil or synthetic oil and, as a result of use, storage or handling, has become unsuitable for its original purpose.

WHITE GOODS — Inoperative or discarded refrigerators, ranges, water heaters, freezers and other similar domestic and commercial large appliances.

YARD WASTE — Solid waste consisting solely of vegetative matter, such as leaves, grass, limbs and trimmings, resulting from landscaping maintenance.

§ 165-13. Residential and other noncommercial property.

- A. Improper storage of waste prohibited. No owner, occupant, tenant or lessee of any property, jointly or severally, may deposit, store or permit to accumulate any solid or hazardous waste upon such property that is not stored or disposed of in a manner prescribed by this article. Further, it shall be the duty of each owner, occupant, tenant or lessee to provide approved receptacles as specified in § 165-15A.
- B. Open dumps prohibited. No person shall permit on any land owned, occupied or leased by him or her any open dump.
- C. Responsibility for removal. It shall be the duty of any owner, occupant, tenant or lessee of any property, jointly or severally, to remove or properly dispose of any of the conditions described in Subsection A above. This section shall also apply to refuse and other solid waste deposited on any property through the action of streams, creeks, rivers, lakes or other waterways or through the runoff of any such waterways. In removing such conditions, persons may seek the guidance of the Henderson County Solid Waste Director and shall follow the procedures set forth in § 165-18 below.

§ 165-14. Commercial, industrial and institutional property.

- A. Proper maintenance of premises. The owner, proprietor or person in charge of any commercial, industrial or institutional building, parking lot or other site shall be obligated, both jointly and severally, to keep driveways, yards, parking lots and areas adjacent thereto and under his control clean at all times and to place sweepings, litter, refuse and other debris in an approved receptacle to prevent dispersal by wind, rain, animals and other causes. Further, no crate, box or similar container liable to deterioration by sun, wind, rain, animals or other causes shall be kept on any street or sidewalk, parking lot or other area, except that such containers may be placed out for collection on the day of such collection.
- B. Solid waste receptacles required. The owner, proprietor or person in charge of any commercial, industrial or institutional building, parking lot or other site shall be obligated, jointly and severally, to provide solid waste receptacles of sufficient size and quantity as specified in § 165-15 of this article. Specifically, but not exclusively, the requirement for such containers shall apply to shopping centers, supermarkets, convenience stores, fast-food and other restaurants, service stations and other similar establishments and shall likewise apply to industries, commercial establishments, schools, manufactured home parks, recreational vehicle parks, summer camps, churches and other institutions. Spillage and overflow from such containers shall be cleaned up by the owner, proprietor or person in charge immediately and as it occurs.

§ 165-15. Storage.

- A. Storage container requirements. Solid waste shall be stored in a container that is durable, rust resistant, nonabsorbent, watertight and easily cleaned, with a close-fitting, flytight cover in place. The number of containers shall be adequate to store one week's accumulation of solid waste. Containers shall be limited to 32 gallons maximum capacity. Containers shall be kept clean so that no insect breeding, odor or other nuisance will exist.
- B. Rodents. Solid waste shall be stored in a manner that will not harbor rodents and vermin and will not create a fire hazard.
- C. Storage of other refuse. Other refuse may be stored as in Subsection A above but shall be stored in such manner that it will not provide harborage to rats, cause a fire or safety hazard or become windblown.
- D. Cardboard boxes as receptacles. Cardboard boxes, cartons and crates may be used as refuse receptacles only when used to contain other refuse and when properly secured by tying or taping. Cardboard boxes, crates or cartons used as refuse receptacles shall have a one-time use only and shall be collected along with the refuse contained in them.
- E. Airtight containers prohibited. No person shall leave outside of the building or dwelling, or in any place accessible to children, any abandoned, unattended or discarded ice box, refrigerator or other container of any kind which has an airtight door without first removing the door from such icebox or refrigerator.

§ 165-16. Collection.

- A. Frequency of removal. All solid waste shall be removed from any property upon which it is stored at least once a week.
- B. Hiring of permitted collector allowed. The owner, occupant, tenant or lessee may remove such solid wastes in accordance with §§ 165-17 and 165-18 below or may contract with a permitted collector serving the relevant area.
- C. Spillage prohibited. These permitted collectors shall be responsible for removing any solid waste spilled during the collection process, shall leave the premises in a clean condition and shall conform to the provisions of any County ordinance in effect regulating the collection and disposal of solid waste by private collectors in Henderson County.
- D. Recycling program required. All private haulers who collect solid waste for a fee will be required to establish a program to collect and recycle aluminum cans and corrugated cardboard. Private haulers may not accept said material if commingled with the solid waste they collect. **[Amended 11-18-1998]**

§ 165-17. Transportation.

- A. Conformity with ordinance required. No solid waste shall be transported except in conformance with this section which applies to permitted haulers and individuals hauling their own solid waste.
- B. Spillage prohibited. The vehicles or containers used for the collection and transportation of solid wastes shall be loaded and removed in such a manner that the contents will not fall, leak or spill therefrom. Materials spilled by the hauler shall be picked up immediately by the hauler and returned to the vehicle or container and the area properly cleaned.
- C. Cover requirements. Vehicles shall be covered by effective means during transportation to prevent blowing of materials from out of the vehicle. "Effective means" shall include, but not be limited to, durable, heavy plastic or canvas tied down or secured to cover all the load. Loads consisting of bulky waste, white goods, lumber, pallets and crates do not have to be covered but shall be secured with rope or tie-downs to assure spillage does not occur. Upon entrance to the facility gate, any removal of tarps or similar covers on solid waste shall be prohibited until the destination is reached in a designated facility disposal area. **[Amended 12-17-1997]**
- D. Display of permit numbers. All vehicles, except those owned by individuals transporting their own solid waste, shall display their permit number issued by the Solid Waste Director.

§ 165-18. Disposal.

- A. No disposal except as provided. Solid waste shall be disposed of only by one of the following methods:
 - (1) Sanitary landfill that has been approved by the Department.
 - (2) Incinerator that meets all requirements of the local, state and federal air pollution standards and control permits.
 - (3) Transfer station that has been approved by the Department. **[Added 12-17-1997** Editor's Note: This ordinance also redesignated former Subsection A(3) as Subsection A(4). **]**
 - (4) Any other method, including reclaiming, composting or recycling processes, that has been approved by the Solid Waste Director.
- B. Disposal of hazardous, regulated medical, radioactive waste. Hazardous, regulated medical and radioactive wastes shall be disposed of according to written procedures approved by the Department.
- C. Littering prohibited. No person may intentionally or negligently discard, dispose, leave or dump any solid waste on or along any street or highway or on public or private property unless such solid waste is placed in a receptacle or at a location designated for the deposit of solid waste.
- D. Disposal of tires. The disposal of tires on publicly or privately owned property is strictly prohibited. Nothing in this article shall be interpreted to preclude the use of tires in an accepted agricultural practice.
- E. Disposal of sharps. Sharps shall be placed in an approved, sealed, punctureproof container prior to disposal.
- F. Burning of solid waste. The purpose of this subsection is for preventing, abating and controlling air pollution

resulting from air contaminants released in the open burning of refuse and other combustible materials. While recognizing that open burning contributes to air pollution, certain types of open burning may reasonably be allowed in the public interest. Therefore, there shall be no burning of solid waste in Henderson County except as authorized by state burning laws.

- G. Private disposal of solid waste. This section shall not be construed to prevent any person from properly disposing of solid waste from his own residence on his property in a safe and sanitary manner and at a depth and distance from any body of water to prevent contamination. All such private disposal sites must receive prior approval by the Solid Waste Director, and all solid wastes deposited must be covered with at least six inches of compacted dirt daily.
- H. Other disposal of solid waste prohibited. Any other disposal of solid waste is expressly prohibited.

§ 165-19. Facility regulations. [Amended 12-17-1997]

- A. Conformity with facility procedures required. Solid waste shall be disposed of at the Henderson County facility in the manner and according to procedures established by the Solid Waste Director.
- B. Facility tours. Facility tours or visitors to the facility must be accompanied by an employee of the Solid Waste Department.
- C. Affiliation with County required. The County facility may be used for the disposal of solid waste generated in Henderson County by County residents and nonresident owners of property in Henderson County.
- D. Hours of operation. The facility shall be open during business hours as established by the Board. The facility holiday schedule will be determined by the County Manager and revised annually and will be posted in the scalehouse. In emergencies, the facility may be opened and closed for additional hours as directed by the County Manager or the Manager's representative.
- E. Security of facility. Except when open during regular business hours, the facility shall be kept locked, and entry shall not be permitted.
- F. Tipping fee. A tipping fee or per vehicle fee shall be charged to all users of the facility. This tipping fee shall be based on the number of tons of material brought for disposal, except that there may be a minimum fee. There will be no fee charged for acceptable recyclable materials that have been separated and properly prepared. The Board shall adopt a schedule of fees from time to time which shall be effective until amended or replaced. Fees shall not be waived for nonprofit organizations. **[Amended 10-2-2000]**
- G. Use by multiple-dwelling properties, parks and camps. Where there is more than one premises located in a residential building, manufactured home park, recreational vehicle park, summer camp or campground, it shall be the responsibility of the owner or person in charge of each building, park or camp to contract with a permitted hauler and to pay for the regular collection of all solid waste from each premises. An owner of a multipremises building, park or camp may apply to the Solid Waste Director for an exemption if it can be shown that he is now disposing of solid waste in a safe and sanitary manner as outlined in this article. In the case where the owner of a multipremises building, park or camp hauls his own solid waste, said waste must be weighed at the scalehouse, and the hauler may not use the boxes set aside for household solid waste.
- H. Loitering and rummaging prohibited. No person may loiter or rummage about the facility or remove articles therefrom.
- I. Speed limit within facility. All persons entering or traveling on facility property shall observe posted speed limits and shall operate their vehicles in a safe and courteous manner.
- J. Vehicles which are not self-unloading will not be allowed in the transfer station. All vehicles which do not use the household containers and are not self-unloading shall arrive at the County facility no later than 30 minutes before the close of the normal operating day. Vehicles which are not self-unloading will be subject to control by the Facility Foreman so as to minimize vehicle congestion and provide easy access to the designated disposal site for self-unloading vehicles.
- K. Only authorized Henderson County personnel will be allowed on the tipping floor of the transfer station, except that a waste hauler may exit his or her truck for mechanical adjustment of his or her vehicle.
- L. Uncovered waste prohibited. No vehicle shall be allowed to deposit waste at the County facility unless the waste is enclosed in the vehicle or secured by methods stated in § 165-17C. The Solid Waste Director shall determine the adequacy of the covering, and his decision shall be final.

- M. Deposit waste only in authorized areas. No person may deposit material at any point in the facility except where indicated by authorized employees of the facility or by official signs.
- N. Discharge of firearms, explosives and fireworks prohibited. No person may discharge firearms, fireworks or explosives on facility property.
- O. Solid waste subject to inspection. Solid waste shall be observed and inspected for prohibited materials. Persons disposing of unacceptable material may be required to remove such materials at the discretion of the Solid Waste Director or Facility Foreman.
- P. Prohibited waste. The following waste may not be disposed of in the County facility:
- (1) Burning or smoldering materials or any other materials that would create a fire hazard.
 - (2) Hazardous waste.
 - (3) Used motor oil (except for recycling).
 - (4) Lead-acid batteries.
 - (5) Liquid waste.
 - (6) White goods (except for recycling).
 - (7) Radioactive waste.
 - (8) Sharps not properly contained.
 - (9) Whole tires which may not be codisposed with solid waste.
 - (10) Sludges.
 - (11) Dead animals.
 - (12) Yard waste, except in the wood waste grinding area. **[Amended 11-18-1998]**
 - (13) Metal drums of 50 gallons or more capacity unless drain holes are provided to prevent containers from holding liquid or unless filled with identifiable solid waste which is otherwise acceptable.
 - (14) Stumps, brush, limbs, yard waste, landscape waste and construction and demolition material mixed with solid waste unless separated prior to disposal.
 - (15) Automobiles, truck or other motor vehicle bodies or large pieces of metal, such as manufactured homes and farm equipment.
 - (16) Wood waste greater than 10 inches in diameter at the butt end and greater than four feet in length. Wood waste greater than two inches in diameter shall not be greater than four feet in length.
 - (17) No ash, flyash or incinerator ash.
 - (18) Regulated medical waste.
 - (19) Friable asbestos.
 - (20) Sawdust.
 - (21) Dirt or soil products (may be reviewed on a load-by-load basis).
 - (22) Corrugated cardboard generated from commercial, industrial and institutional sources, unless there are no materials recovery facilities located in Henderson County. Residential sources of corrugated containers will be allowed in de minimis amounts only. The following items shall not be considered corrugated cardboard: **[Amended 11-18-1998]**
 - (a) Waxed coated cardboard.
 - (b) Cardboard soiled with grease, oils, food waste, chemicals, poisons or pesticides.
 - (c) Cardboard adhered to polystyrene or other plastic.
 - (d) Posterboard, pasteboard tubing or chipboard, such as cereal boxes. This is mixed paper and can be recycled.
 - (23) Aluminum cans.

(24) Antifreeze (ethylene glycol).

§ 165-20. Tires. [Amended 12-17-1997]

Whole automobile and truck tires will be accepted at the designated tire recycling site. Tires must be removed from their rims and be free of water, dirt and debris. Anyone bringing in six or more tires must call in advance and will be required to fill out a tire certification form. Specialized tires, such as large, off-road and heavy equipment tires, will be accepted only if arrangements are made in advance by calling the recycling center. Persons bringing loads containing truck tires or specialized tires will be required to assist in the unloading of such tires and should call in advance.

§ 165-21. White goods and metals. [Amended 12-17-1997]

White goods and large pieces of metal may be deposited at the designated area for recycling.

§ 165-22. Used motor oil; antifreeze.

Used motor oil may be deposited in the tank at the Recycling Center. This tank is for residential users only. No used motor oil will be accepted from commercial or industrial users. Antifreeze is also accepted at this location.

§ 165-23. Recycling encouraged.

Each person who owns, leases or manages a residence, residential unit or place of business, industry, commerce or other place providing goods or services, or institution, church, camp or school is strongly encouraged to remove recyclable materials from the solid waste generated and make them available for recycling.

§ 165-24. Recyclable materials.

Recyclable material shall consist of the following items and shall be prepared for recycling at the County drop-off sites as directed:

- A. Glass [all brown, clear and green container (bottles and jars) glass]: rinsed and caps removed. Labels do not have to be removed.
- B. Aluminum beverage and bimetal (tin or steel) food cans: rinse. Labels do not have to be removed.
- C. Plastic containers No. 1 PETE (soda containers) and No. 2 HDPE (milk and shampoo containers) and Nos. 3, 5 and 7 (mixed plastic): remove caps, rinse, step on containers to flatten them. Labels do not have to be removed. **[Amended 12-17-1997]**
- D. Corrugated containers: flatten.
- E. Mixed paper: See definition.
- F. Newspaper: bundle with string or leave loose. Inserts may remain.
- G. Dry textiles: used clothing, paired shoes, hats, linens, etc. **[Added 12-17-1997** Editor's Note: This ordinance also provided for the redesignation of former Subsection G and Subsection H. **]**
- H. Other material: as it is added to the recycling program.

§ 165-25. Removal of recyclable materials prohibited.

No person, other than a County employee or the County's authorized agent, may remove recyclable material from a recycling collection center.

§ 165-26. Solid waste classification system.

The Solid Waste Advisory Committee shall establish a system of classification for classes of solid waste that shall be consistent with a system of classification in the Solid Waste Management Plan. The classification system shall be used as a basis for requiring that solid waste be delivered to an appropriate County disposal facility in accordance with the Solid Waste Management Plan.

§ 165-27. Permit required; exceptions.

- A. For the purpose of providing for the proper collection, transportation, recycling and/or disposal of solid waste within Henderson County, the Board may grant the right to collect, transport, recycle and/or dispose of solid waste for compensation.
- B. No person shall engage in commercial or industrial solid waste collection, residential household garbage or recyclable material collection for a fee without a permit issued from the Solid Waste Director pursuant to this article. Individuals transporting their own solid waste or recyclables are not required to hold a permit.

§ 165-28. Permit application.

- A. Application for a permit to engage in solid waste, residential household garbage or recyclable material collection shall be filed with the Solid Waste Director on forms approved by the Solid Waste Director. There shall be no fee charged to an applicant for a solid waste collection permit.
- B. Application information required. The applicant shall furnish the following information:
 - (1) Name, address and telephone number of the applicant and whether a sole proprietorship, corporation or partnership, with disclosure of the ownership interest.
 - (2) A list of the equipment possessed, available or to be obtained by the applicant, including the number and type of solid waste receptacles or other containers used for the storage or collection of solid waste, residential household garbage or recyclable material, and the number and type of vehicles used for the transportation and disposal of solid waste, residential household garbage or recyclable material. Each vehicle shall be identified by make, model and license tag number.
 - (3) Number of employees the applicant expects to use in the business.
 - (4) Experience of the applicant in solid waste, residential household garbage or recyclable material collection.
 - (5) Other pertinent information as the Board may hereafter request.

§ 165-29. Inspections.

The Solid Waste Director shall issue such permit only when upon inspection he finds that the facilities, equipment and proposed operating methods of the applicant are in compliance with the requirements of this article.

§ 165-30. Equipment standards.

All trucks and other equipment used by the collector must meet minimum standards prescribed by the Henderson County Solid Waste Management Department. These standards shall require, at a minimum, that truck beds be covered. Vehicles shall be leakproof, durable and easily cleaned to prevent insect breeding, odor or other nuisance and shall be maintained in good repair as determined by the Solid Waste Director.

§ 165-31. Display of permit number. [Amended 11-18-1998]

The permit number of the collector shall be visible on both sides of each of the collector's trucks in numbers not less than three inches high, the color of the numbers to contrast with the color of the truck, and shall be kept clean and legible at all times.

§ 165-32. Existing collectors.

The Solid Waste Director will issue permits to existing collectors who are in business in Henderson County upon

the effective date of this article upon assurance of their compliance with the above sections.

§ 165-33. Appeals.

When any person has made application for a permit to collect or transport solid waste or recyclable materials and the Solid Waste Director has refused to issue said permit to the applicant, the applicant may appeal the refusal by submitting a notice of appeal to the Solid Waste Director. The appeal shall be heard by the Henderson County Board of Commissioners. The notice of appeal must be filed within 10 days after the refusal of the Solid Waste Director to issue the permit.

§ 165-34. Permit renewal and term; permits not assignable.

- A. Permits will be issued upon successful completion of the permit application and inspection by the Solid Waste Director or his authorized agent.
- B. All permits, regardless of the date issued, must be renewed every January and will be valid for a period of one year.
- C. No permit issued pursuant to this article shall be assignable.

§ 165-35. Revocation of permit; appeals.

- A. Whenever, upon inspection of the facilities, equipment or operating methods of any person collecting, transporting or disposing of solid waste or recyclable materials, the Solid Waste Director finds that conditions or practices exist which are in violation of the provisions of this article, the Solid Waste Director shall give notice in writing to such person that unless such conditions or practices are corrected within 30 days the operating permit of such person shall be revoked. Haulers will be allowed to collect, transport and dispose of solid waste or recyclable materials during this thirty-day period. No such permit shall be reinstated by the Solid Waste Director until he finds, upon reinspection, that all provisions of these regulations have been complied with, except that following a hearing as hereinafter provided such permit may be reinstated by order of the Solid Waste Department. The Solid Waste Director shall be the only person authorized to enforce this subsection.
- B. Any revocation of a solid waste hauler's permit may be appealed to the Henderson County Board of Commissioners by the submission of a notice of appeal to the Solid Waste Director within 10 days of the effective date of the revocation. If a notice of appeal is not filed within 10 days, the permit shall be deemed to have been automatically revoked.

§ 165-36. Violations and penalties.

- A. This article may be enforced by any methods authorized by N.C.G.S. 153A-123 or 153A-277. Such methods shall be carried out in accordance with the procedures outlined in Chapter 1, General Provisions, Article II, and as provided below. Editor's Note: Original Sections 1001, Criminal Penalties, 1002, Civil Penalties, and 1003, Equitable Remedies, which immediately followed this subsection, were deleted 11-18-1998. **[Amended 11-18-1998]**
- B. Violations of this article by a permitted hauler may subject the hauler to a revocation of his permit in accordance with § 165-35 and may, in addition, subject the hauler to any actions specified in Chapter 1, General Provisions, Article II.

§ 165-37. Delinquent accounts. [Amended 12-17-1997]

Section 165-19 of this article provides the payment of a tipping fee by users of the facility. The Solid Waste Department shall have the authority to set up accounts with regular users of the facility to be billed on a monthly basis. When any account becomes more than 10 days past due, the Solid Waste Department and its billing and collecting agent shall be authorized to discontinue service to the holder of the delinquent account until such time as the account is paid in full. Further, the Solid Waste Department shall be authorized to use any means that a private citizen could use to collect a debt, including, but not limited to, the institution of a civil action to collect the moneys owed.

§ 165-38. Responsibility for refuse found outside sanitary landfill.

- A. If any object of refuse is discovered upon any lands or waters in any areas of Henderson County other than an approved sanitary landfill or other proper receptacle and said refuse bears the name, address or other means of identification of a person or persons, the person(s) so identified shall be presumed to have disposed of said refuse in violation of this article.
- B. Bags, boxes, bins, cartons and other containers used to carry food, clothing and other goods and printed matter purchased, rented or otherwise obtained from a restaurant, supermarket, store or other place of business or organization, which container or printed matter bears the logo, name and address or other means of identification of the place from which the goods were obtained, shall not be considered as a means of identification for purposes of this section.

§ 165-39. Assistance for correction of violation.

On receipt of a notice of a violation, a person may request the aid of the Solid Waste Department in correcting the violation and shall pay to the Solid Waste Department any costs incurred by the Solid Waste Department in removing or otherwise correcting the violation.

APPENDIX B: COUNTY POPULATION, WASTE DISPOSAL, PER CAPITA RATE AND PERCENT REDUCTION, FY 2003-2004

COUNTY	POPULATION JULY 2003	MSW TONS MANAGED	MSW TONS DISPOSED				BASE YEAR PER CAPITA	PER CAPITA RATE	%CHANGE FROM 1991-1992
		1991-1992	2000-2001	2001-2002	2002-2003	2003-2004	1991-1992	2003-2004	2003-2004**
ALAMANCE	136,372	99,302	142,244	143,394	144,913	143,345	0.91	1.05	16%
ALEXANDER	34,532	25,716	24,636	25,017	27,834	26,126	0.90	0.76	-16%
ALLEGHANY	10,790	14,131	8,160	8,027	8,249	8,193	1.45	0.76	-48%
ANSON	25,224	14,229	19,471	23,145	29,544	24,796	0.61	0.98	61%
ASHE	25,086	18,089	24,903	22,881	22,587	22,367	0.81	0.89	10%
AVERY	18,093	11,130	16,724	16,673	16,251	18,406	0.74	1.02	37%
BEAUFORT	45,589	41,796	51,840	56,663	67,593	70,668	0.99	1.55	57%
BERTIE	19,813	17,372	21,319	27,614	22,622	36,922	0.86	1.86	117%
BLADEN	32,784	25,048	35,536	37,480	44,554	31,482	0.86	0.96	12%
BRUNSWICK	81,810	78,123	87,059	103,367	120,506	140,371	1.48	1.72	16%
BUNCOMBE	212,246	159,040	251,472	247,830	255,112	319,594	0.90	1.51	67%
BURKE	88,790	78,006	88,239	86,459	81,642	85,273	1.02	0.96	-6%
CABARRUS	143,433	95,215	187,508	203,981	250,162	254,210	0.94	1.77	89%
CALDWELL	78,132	65,532	91,387	86,065	88,730	79,633	0.92	1.02	11%
CAMDEN	7,844	1,850	2,872	3,033	3,630	4,326	0.31	0.55	78%
CARTERET	60,574	86,894	78,191	80,691	88,515	101,589	1.62	1.68	4%
CASWELL	23,720	5,136	11,250	9,486	9,116	9,672	0.25	0.41	63%
CATAWBA	146,458	151,559	156,951	165,509	192,830	196,758	1.26	1.34	7%
CHATHAM	53,684	33,235	28,377	28,155	40,298	39,955	0.84	0.74	-11%
CHEROKEE	25,280	16,020	20,209	19,108	18,977	19,132	0.78	0.76	-3%
CHOWAN	14,366	13,692	16,804	15,429	16,621	24,102	0.99	1.68	69%
CLAY	9,368	4,172	4,480	4,848	4,792	5,283	0.57	0.56	-1%
CLEVELAND	97,548	73,138	87,224	84,793	150,089	120,048	0.86	1.23	43%
COLUMBUS	54,557	45,199	42,526	38,628	32,431	52,358	0.91	0.96	5%
CRAVEN	92,692	86,549	92,746	87,056	88,270	94,139	1.05	1.02	-3%
CUMBERLAND	307,856	227,302	351,620	403,476	337,375	358,348	0.81	1.16	44%
CURRITUCK	20,598	13,792	26,241	26,943	31,116	43,358	1.00	2.10	110%
DARE	33,328	51,300	73,445	75,809	96,697	127,088	2.23	3.81	71%
DAVIDSON	151,935	139,617	137,460	125,040	139,610	166,190	1.08	1.09	1%

APPENDIX B: COUNTY POPULATION, WASTE DISPOSAL, PER CAPITA RATE AND PERCENT REDUCTION, FY 2003-2004

COUNTY	POPULATION JULY 2003	MSW TONS MANAGED	MSW TONS DISPOSED				BASE YEAR PER CAPITA	PER CAPITA RATE	%CHANGE FROM 1991-1992
		1991-1992	2000-2001	2001-2002	2002-2003	2003-2004	1991-1992	2003-2004	2003-2004**
DAVIE	37,222	19,348	33,288	35,279	37,735	33,983	0.68	0.91	34%
DUPLIN	50,775	33,310	37,909	45,558	43,416	56,243	0.82	1.11	35%
DURHAM	236,088	218,972	238,894	260,680	298,420	295,594	1.17	1.25	7%
EDGECOMBE	54,077	71,471	113,185	89,138	60,805	64,010	1.25	1.18	-5%
FORSYTH	317,643	304,290	465,134	447,508	501,034	550,614	1.14	1.73	52%
FRANKLIN	51,652	28,702	47,554	52,775	47,668	50,129	0.76	0.97	28%
GASTON	191,236	165,100	215,226	214,185	216,267	226,625	0.93	1.19	27%
GATES	10,834	5,897	5,044	5,426	5,250	6,473	0.63	0.60	-5%
GRAHAM	8,044	4,508	7,724	6,845	7,681	6,464	0.62	0.80	30%
GRANVILLE	52,442	54,548	61,014	71,174	68,759	68,947	1.39	1.31	-5%
GREENE	19,882	7,428	7,636	5,677	5,942	6,543	0.48	0.33	-31%
GUILFORD	431,199	471,541	730,012	758,566	709,579	659,224	1.35	1.53	13%
HALIFAX	56,874	54,907	50,389	50,486	53,760	42,186	0.98	0.74	-24%
HARNETT	97,794	69,073	70,712	74,032	73,593	85,390	1.01	0.87	-14%
HAYWOOD	55,822	57,842	44,448	50,438	51,047	55,627	1.21	1.00	-18%
HENDERSON	94,496	81,498	95,443	97,650	104,249	116,840	1.14	1.24	8%
HERTFORD	23,755	14,288	20,659	19,315	21,206	24,984	0.63	1.05	67%
HOKE	36,990	18,331	19,977	22,426	28,027	31,269	0.80	0.85	6%
HYDE	5,720	2,762	5,086	4,739	4,296	9,874	0.50	1.73	245%
IREDELL	133,280	114,539	174,900	169,967	174,819	191,086	1.19	1.43	20%
JACKSON	34,990	18,661	40,476	38,542	39,230	41,448	0.68	1.18	74%
JOHNSTON	136,304	74,169	136,796	159,475	176,576	186,181	0.88	1.37	55%
JONES	10,184	4,360	1,647	2,488	2,725	3,008	0.47	0.30	-37%
LEE	49,792	48,341	67,018	61,739	67,648	67,941	1.16	1.36	18%
LENOIR	58,900	67,693	93,061	99,163	89,576	89,217	1.17	1.51	29%
LINCOLN	67,394	44,442	70,311	82,695	82,930	89,475	0.87	1.33	53%
MACON	31,376	19,738	30,009	32,483	35,825	35,388	0.82	1.13	38%
MADISON	19,976	11,676	12,464	14,863	13,056	13,654	0.68	0.68	1%
MARTIN	24,928	30,112	18,475	18,804	17,458	17,038	1.19	0.68	-43%

APPENDIX B: COUNTY POPULATION, WASTE DISPOSAL, PER CAPITA RATE AND PERCENT REDUCTION, FY 2003-2004

COUNTY	POPULATION JULY 2003	MSW TONS MANAGED 1991-1992	MSW TONS DISPOSED				BASE YEAR PER CAPITA 1991-1992	PER CAPITA RATE 2003-2004	%CHANGE FROM 1991-1992 2003-2004**
			2000-2001	2001-2002	2002-2003	2003-2004			
MCDOWELL	43,080	29,180	38,015	36,698	38,321	38,065	0.82	0.88	8%
MECKLENBURG	750,221	677,573	1,233,824	1,279,090	1,278,129	1,280,887	1.29	1.71	32%
MITCHELL	15,925	15,768	16,287	17,120	13,865	14,500	1.11	0.91	-18%
MONTGOMERY	27,332	28,873	29,567	38,236	45,267	46,175	1.23	1.69	37%
MOORE	78,226	74,062	94,265	89,503	84,819	90,359	1.23	1.16	-6%
NASH	89,626	84,594	59,396	101,051	103,213	113,994	1.09	1.27	17%
NEW HANOVER	169,050	157,647	259,305	241,951	250,327	264,387	1.28	1.56	22%
NORTHAMPTON	21,798	19,528	13,204	10,757	19,271	29,323	0.94	1.35	43%
ONslow	156,967	158,344	144,917	157,279	149,346	181,006	1.04	1.15	11%
ORANGE	120,881	131,067	103,344	98,415	89,547	88,062	1.36	0.73	-46%
PAMLICO	12,992	8,541	7,357	8,060	8,359	12,462	0.75	0.96	28%
PASQUOTANK	36,432	30,150	32,065	35,131	37,123	39,926	0.97	1.10	13%
PENDER	43,699	18,188	21,718	27,351	29,063	30,586	0.60	0.70	17%
PERQUIMANS	11,712	7,520	7,969	8,348	9,396	15,278	0.73	1.30	79%
PERSON	36,980	24,249	32,938	32,430	35,017	35,014	0.80	0.95	18%
PITT	139,007	132,896	137,342	152,049	152,459	148,860	1.21	1.07	-11%
POLK	18,896	9,327	14,079	10,988	14,001	13,353	0.63	0.71	12%
RANDOLPH	134,980	78,663	105,189	115,987	120,390	127,792	0.73	0.95	30%
RICHMOND	46,490	60,752	38,877	55,651	64,246	76,304	1.35	1.64	22%
ROBESON	125,554	104,700	128,176	117,366	126,032	129,897	0.99	1.03	5%
ROCKINGHAM	92,423	71,481	97,313	94,982	100,478	97,642	0.83	1.06	27%
ROWAN	133,134	90,081	142,801	139,616	135,552	132,201	0.80	0.99	24%
RUTHERFORD	63,432	89,175	59,837	65,080	63,608	72,756	1.56	1.15	-26%
SAMPSON	62,214	33,545	45,333	47,453	52,657	54,907	0.70	0.88	26%
SCOTLAND	35,506	39,867	45,983	36,428	42,092	45,112	1.17	1.27	9%
STANLY	59,060	69,288	69,654	73,494	74,341	83,181	1.32	1.41	7%
STOKES	45,604	17,976	12,716	15,657	16,223	15,656	0.47	0.34	-27%
SURRY	71,980	73,595	73,848	71,956	68,830	83,583	1.18	1.16	-2%
SWAIN	13,353	5,651	7,334	9,132	8,286	9,343	0.50	0.70	40%

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COUNTY	POPULATION JULY 2003	MSW TONS MANAGED 1991-1992	MSW TONS DISPOSED				BASE YEAR PER CAPITA 1991-1992	PER CAPITA RATE 2003-2004	%CHANGE FROM 1991-1992 2003-2004**
			2000-2001	2001-2002	2002-2003	2003-2004			
TRANSYLVANIA	29,468	30,072	28,103	29,180	30,539	32,343	1.16	1.10	-5%
TYRRELL	4,226	2,985	2,186	2,361	3,021	2,023	0.79	0.48	-39%
UNION	144,708	77,842	171,781	165,366	166,558	166,124	0.90	1.15	28%
VANCE	43,860	43,267	55,625	56,260	52,119	50,799	1.11	1.16	4%
WAKE	699,503	569,622	926,504	880,136	856,043	914,252	1.29	1.31	1%
WARREN	20,054	10,978	9,518	8,685	10,996	13,656	0.63	0.68	8%
WASHINGTON	13,468	11,699	9,859	13,346	12,692	18,230	0.84	1.35	61%
WATAUGA	42,772	36,755	47,220	49,014	50,099	53,111	0.99	1.24	25%
WAYNE	113,988	106,149	112,683	133,568	124,473	122,582	1.00	1.08	8%
WILKES	66,909	58,818	59,147	60,671	60,189	61,686	0.97	0.92	-5%
WILSON	75,662	120,870	129,960	133,235	138,607	123,837	1.82	1.64	-10%
YADKIN	36,821	20,779	19,795	19,767	20,212	22,651	0.67	0.62	-8%
YANCEY	17,926	15,576	12,091	11,718	11,912	12,356	1.01	0.69	-32%
STATE TOTALS	8,418,090	7,257,428	9,752,510	9,999,284	10,236,960	10,713,444	1.08	1.27	18%

TOTAL ADJUSTED FOR HURRICANE
DEBRIS (e.g. FRAN, FLOYD)

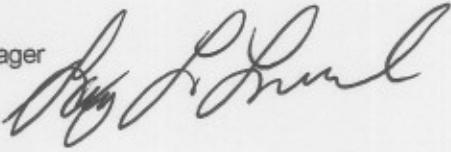
** Percent Change formula: (current year per capita minus base year per capita) divided by base year per capita

APPENDIX

H

CORRESPONDENCES

Memo

To: Steve Wyatt, County Manager
From: Gary T. Tweed, P.E. 
Date: 4/28/2006
Re: Update to 10-Year Solid Waste Management Plan

Every 3 years the County is required by the N.C. Division of Solid Waste to update the 10-Year Solid Waste Management Plan. The original plan was developed in 1997 by staff and I have provided the updates for 2000, 2003 and now 2006. All of the municipalities have joined with the County in this plan. This relieves them of the requirement to develop their own plan. I have heard from all of the municipalities except Hendersonville, have received adopting resolutions already from Laurel Park and Flat Rock. I expect to receive all municipal resolutions by the time we need to submit the update in June.

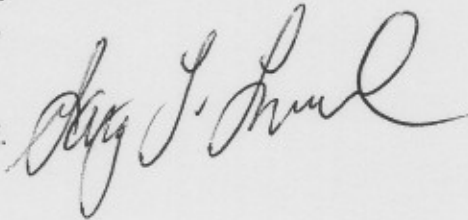
The Solid Waste Advisory Committee reviewed the update during March and April and made some suggested changes at their April 17th meeting. These changes have been incorporated into the update. We are required to hold a public hearing and our Board adopt the plan by resolution. The public hearing is scheduled for the May 19th Board meeting and will be advertised in the Hendersonville Times News.

A copy of the update is enclosed along with a resolution, for adoption by the Board at their May 19, 2006 meeting. Should you wish to meet to discuss the update, please advise.

Memo

To: City of Hendersonville
Town of Fletcher
Town of Laurel Park
Village of Flat Rock
Town of Mills River

From: Gary T. Tweed, P.E.



CC: Justin Hembree

Date: 3/7/2006

Re: Draft – Update to Henderson County 10 – Year Solid Waste Management Plan

In 1997 the N.C. Division of Solid Waste required all units of governments to develop a 10 – Year Solid Waste Management Plan. In June of 1997, the Henderson County Solid Waste Department in a joint effort with our municipalities, prepared the 10 – Year Solid Waste Management Plan. By joining with the County the municipalities did not have to develop individual plans. The plan is required to be updated every 3 years. The 2000 and 2003 updates were prepared by the County and adopted by the municipalities. The Town of Mills River was not incorporated at the time of the last update but if they choose to participate, they may do so at this time.

We are again at a 3-year update to the plan. Enclosed please find a draft of the Update to the Henderson County 10 - Year Solid Waste Management Plan, copies of the previous municipal and county resolutions adopting the 2003 Plan Update. Should the municipalities wish to continue joining with the County, it will be necessary for the municipality to hold a public hearing before June and adopt the Update by resolution.

Each municipality should have a copy of the original 10- Year Solid Waste Management Plan, and previous 3 –Year Updates. If needed, one copy is available for review at my office. Should there be any questions, do not hesitate to contact me at 828-698-5115.

HENDERSON COUNTY BOARD OF COMMISSIONERS

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Hendersonville, North Carolina 28792-5097
Phone: 828-697-4808 • Fax: 828-698-6183
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GRADY HAWKINS
Chairman
LARRY YOUNG
Vice-Chairman

WILLIAM MOYER
CHARLIE MESSER
SHANNON BALDWIN

RESOLUTION

WHEREAS, better planning for solid waste will help protect public health and the environment, provide for an improved solid waste management system, better utilize our natural resources, control the cost of solid waste management, and

WHEREAS, N.C. General Statute 130-A309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a 10-year comprehensive Solid Waste Management Plan and to update this plan every three years; and

WHEREAS, Henderson County has provided adequate opportunity for public input on the update to the 10-year Solid Waste Management Plan, by means of a public meeting held on May 21, 2003;

NOW, THEREFORE, BE IT RESOLVED that the Henderson County Board of Commissioners hereby approves the Henderson County 10 Year Solid Waste Management Plan Update.

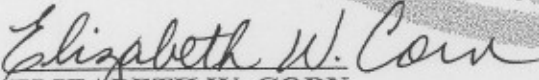
Adopted this the 21st of May 2003.

APPROVED BY:


GRADY HAWKINS, CHAIRMAN

HENDERSON COUNTY BOARD OF COMMISSIONERS

ATTESTED BY:


ELIZABETH W. CORN
CLERK TO THE BOARD

Town of Laurel Park

HENRY T. JOHNSON, Mayor
JAMES E. DORE, Commissioner
KEITH A. MADDOX, Commissioner
RICHARD M. JONES, Commissioner
and Mayor Pro Tem

441 White Pine Drive
Post Office Box 2529
Hendersonville, NC 28793-2529
(828) 693-4840
FAX (828) 696-4948

DONA M. MENNELLA, Commissioner
ANITA HOSACK, CMC, Town Clerk
D. SAMUEL NEILL, Town Attorney
JAMES W. BALL, JR., Town Manager

RESOLUTION TO APPROVE THE HENDERSON COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE

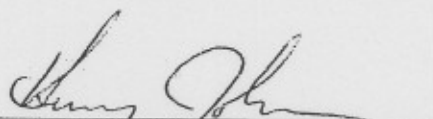
WHEREAS, better planning for solid waste will help protect public health and the environment, provide for an improved solid waste management system, better utilize our natural resources, control the cost of solid waste management; and,

WHEREAS, NC General Statute 130A-309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a 10-year comprehensive Solid Waste Management Plan and to update this plan every three years; and,

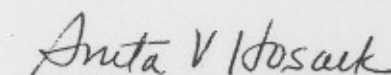
WHEREAS, the Town of Laurel Park was represented on the Henderson County Solid Waste Management Plan Advisory Committee and has been actively involved in the planning process;

NOW, THEREFORE, BE IT RESOLVED that the Town Council of the Town of Laurel Park hereby approves the Henderson County comprehensive Solid Waste Management Plan Update.

Adopted this the 20th day of May 2003.


Henry T. Johnson
Mayor

ATTEST:


Anita V. Hosack, CMC
Town Clerk

RESOLUTION TO APPROVE THE HENDERSON COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE

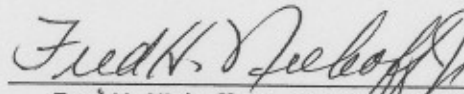
Whereas, better planning for solid waste will help protect public health and the environment, provide for an improved solid waste management system, better utilize our natural resources, control the cost of solid waste management; and

Whereas, NC General Statute 130-A309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a 10 year comprehensive Solid Waste Management Plan and to update this plan every three years; and

Whereas, the City of Hendersonville has provided adequate opportunity for public input in the process by means of a public meeting;

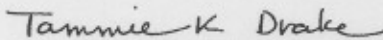
Now, Therefore, Be It Resolved that the City of Hendersonville hereby approves the Henderson County Solid Waste Management Plan Update.

Adopted this eighth of May, 2003.



Fred H. Niehoff, Jr., Mayor, City of Hendersonville

ATTEST:



Tammie K. Drake, CMC, City Clerk

G:\Clerk\Resolutions\2003\Solid Waste app res.wpd



TOWN OF FLETCHER

'PRIDE IN OUR PAST, FAITH IN OUR FUTURE'

WILLIAM B. MOORE
MAYOR

EDDIE HENDERSON
MAYOR PRO-TEM



COUNCIL MEMBERS:
MILTON BYRD
JIM CLAYTON
HUGH CLARK

TOWN MANAGER:
CRAIG F. HONEYCUTT

May 14, 2003

Henderson County Solid Waste Department
802 Stoney Mountain Rd.
Hendersonville, NC 28791

Attention: Gary T. Tweed, P.E., County Engineer

Dear Mr. Tweed:

In accordance with N.C. General Statute § 130A-A309.09A (b) we are enclosing Resolution R-03-6, a Resolution to Approve the Henderson County Solid Waste Management Plan Update. Prior to this resolution being approved, Council held a public hearing at Monday night's meeting, which had been advertised in the Hendersonville Times News on Thursday, May 8, 2003. There was no public comment during the public hearing.

This resolution was unanimously approved by the Fletcher Town Council at their regular meeting on Monday, May 12, 2003.

If you require any additional information, please let us know.

Sincerely,

A handwritten signature in cursive script that reads "Janice G. Sherlock".

Janice G. Sherlock, C.M.C.
Town Clerk

Enclosure: Resolution R-03-6

4005 Hendersonville Road, Fletcher, NC 28732
(828) 687-3985 (828) 687-7133 fax
www.town-of-fletcher-nc.com

control the cost of solid waste management; and

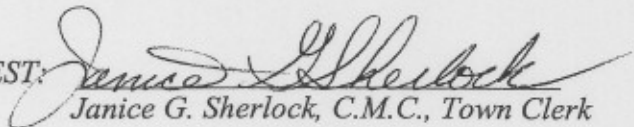
WHEREAS, N.C. General Statute § 130-A309.09A (b) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a 10-year comprehensive Solid waste Management Plan and to update this plan every three years; and


WHEREAS, the Town of Fletcher has provided adequate opportunity for public input in the process by means of a public meeting;

NOW, THEREFORE, BE IT RESOLVED that the Town of Fletcher hereby approves the Henderson County Solid Waste Management Plan Update.

Adopted this the 12th day of May, 2003.

ATTEST:


Janice G. Sherlock, C.M.C., Town Clerk


William B. Moore, Mayor



RESOLUTION NO. 104

THE VILLAGE OF FLAT ROCK, NORTH CAROLINA
A RESOLUTION TO APPROVE THE HENDERSON COUNTY SOLID WASTE
MANAGEMENT PLAN UPGRADE

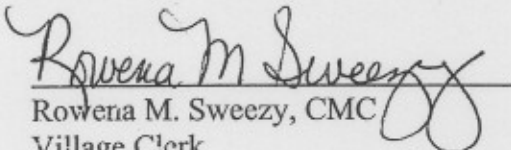
WHEREAS, better planning for solid waste will help protect public health and the environment, provide for an improved solid waste management system, better utilize our natural resources, control the cost of solid waste management; and

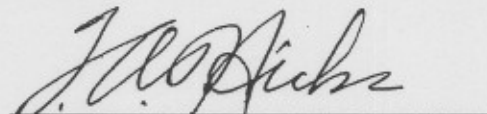
WHEREAS, NC General Statute 130-A 309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a 10-year comprehensive Solid Waste Management Plan and to update this plan every three years; and

WHEREAS, the Village of Flat Rock has provided adequate opportunity for public input in the process by means of a public meeting;

NOW, THEREFORE, BE IT RESOLVED that the Village of Flat Rock hereby approves the Henderson County Solid Waste Management Plan Update.

Adopted this the 2nd day of June, 2003.


Rowena M. Sweezy, CMC
Village Clerk


Terry A. Hicks
Mayor

AGENDA

Henderson County Board of Commissioners
100 North King Street – Hendersonville, NC 28792
Thursday, April 27, 2006
5:00pm

I. Call to Order

II. Discussion/Adjustment of Agenda

III. Discussion Items

Local Option Sales Tax Distribution Method

IV. Important Dates

Set Public Hearing for BRCC Special Use Permit (Technology Education Center)
[Proposed date is May 17, 2006 at 11:00am]

V. Workshop

Solid Waste Advisory Committee Recycling Enhancements Report

VI. Adjournment

REQUEST FOR BOARD ACTION

**HENDERSON COUNTY
BOARD OF COMMISSIONERS**

MEETING DATE: April 27, 2006

SUBJECT: Solid Waste Advisory Committee Recycling Enhancements Report

ATTACHMENTS: 1) SWAC Report
2) Staff Memorandum

SUMMARY OF REQUEST:

The Henderson County Board of Commissioners requested the Solid Waste Advisory Committee to study improvements to the Recycling Programs for Henderson County. The SWAC has completed its study and finalized a report to the Board. The SWAC will present the report to the Board at a special workshop scheduled for 4pm on April 27, 2006. The County Engineer has assisted the SWAC in the development of the report and will be present to discuss the report with the Board.

COUNTY MANAGER'S RECOMMENDATION/ACTION REQUIRED:

Request Board guidance as to possible enhancements to the County's recycling program.

**HENDERSON COUNTY
SOLID WASTE ADVISORY
COMMITTEE**

**REPORT TO THE HENDERSON
COUNTY BOARD OF
COMMISSIONERS**

**RECYCLING PROGRAM
IMPROVEMENTS**

MAY 2006

INTRODUCTION

The Henderson County Board of Commissioners requested the Solid Waste Advisory Committee (SWAC) to study various improvements to the County's Solid Waste Recycling Program. During the Fall of 2005 the Board received a request from the Ad Hoc Committee for Recycling Reform to study improvements in the areas of education/planning, household hazardous waste and electronics recycling, county wide collection of household recyclables, expansion of school and county office recycling programs, and hiring a recycling coordinator. The Board requested the SWAC to study these issues and to report back to the Board by May 1, 2006 with any recommendations on improvements to the County's Recycling Program.

The SWAC began work holding monthly meetings of the full committee. Three subcommittees were formed to look at three specific areas, education/schools/county offices, and special wastes including household hazardous waste and electronics, and County curbside collection. The SWAC has finalized this report and is making recommendations that the Henderson County's Recycling Program be expanded and to consist of five elements as follows:

Administration

Education

Special Wastes

Collection

Convenience Center Operation

Each of these elements will be discussed in detail with a projected budget for that element. The proposed funding of this program will be through an annual household recycling fee collected each year on the property tax bill.

ADMINISTRATION

The administration of the recycling program will be through a full time recycling coordinator. This position would be hired within the current Solid Waste Department with funding for the position to be by a portion of the annual household recycling fee. This staff person would be responsible for running the entire program including development of educational programs for schools and community, coordination of special waste collection events, development of county wide curbside collection program, monitoring operations of current recycling center. The position would write any needed requests for proposals and development of contracts for services an any of these areas. Estimated annual budget for this position would be in the order of \$65,000 to include salary and benefits, office space, travel, and office support.

EDUCATION

This portion of the report was prepared by Katie Breckheimer Chair of the Subcommittee on Education

Recycling Education and County Office Building Recycling

A sub-committee of the Henderson County

Solid Waste Advisory Committee

Summary Report, March 23, 2006

Committee members: Katie Breckheimer, chair, Emily Anderson, SWAC member, Sally Boerschig and Diane Rhoades, Ad-hoc Committee for Recycling Reform members, Holly Bullman, LOS Regional Council staff

The Henderson Co. Recycling Educational Philosophy should be structured by the waste hierarchy of reducing our waste first and foremost. It is important to stop relying on the Solid Waste enterprise fund as a way of doing business. It goes directly against the idea of reducing our waste. We need to stop thinking in terms of "the more garbage we generate, the more money we make" or "if we reduce our waste, we will lose money." Waste and recycling services are services like any other that the county provides to its citizens. Education should also include communicating about ways to reuse things, as well as recycle them.

The sub-committee researched 3 categories:

- **Community Solid Waste and Recycling Education**
- **School Solid Waste and Recycling Education**
- **County Office Building Recycling**

Re: Community Solid Waste and Recycling Education

What is most important to the education component is a full-time recycling coordinator. This staff person will drive the plan and work on community education.

The committee feels it is very important to make improvements to the practical elements first, and then be prepared to follow-up with good education surrounding the new and improved recycling elements. Simply put, if we jumpstart education without making it easy and convenient to recycle the education work will backfire.

The committee feels that some immediate improvements can be made to the existing recycling drop-off site at the transfer station. The new gravel is appreciated, but the next most critical need there is for more signage. Good (professional) signage is needed, instructing users on how-to recycle and how-to move around safely for improved traffic flow. Signs at the entrance are needed as well.

The committee concludes that there is a direct correlation between education and increased participation. A large line-item for education on the recycling budget must be included in the new plan in order to see improved waste reduction and recycling in Henderson County.

The following suggestions were made for community education:

- Frequent articles in the newspaper and other print material.
- Rewrite county recycling brochure and include more obscure things like how-to recycle batteries, paint, coat hangers, packing material, etc.
- Have an aggressive distribution plan for the recycling brochure, i.e. have at Op House, in Welcome Wagon packets, at all libraries, etc.
- Run announcements and ads on channel 11, government cable channel.
- Run ads at movie theaters, pre-movie cinema ads.
- Have a recycling float in the Apple Festival Parade, *the Recycle Guys*.
- Include recycling "how to" on Henderson County web page.
- Do a large print-run of t-shirts and sweatshirts with recycling message.
- Work with Cooperative Extension Service to do backyard composting exhibits and education.
- Facilitate commercial recycling
- Get Chamber of Commerce Environmental Committee involved. Highlight what businesses are recycling, and how they do it, in Chamber newsletter.

Re: School Solid Waste and Recycling Education

ECO's Environmental Education Committee has been working with the county schools to get waste paper recycling up and running in each of the 23 schools. This is the second year of the project, and is a collaboration between the schools' facility manager, GDS (the school's waste hauler), LOS Regional Council, and ECO. It is hopeful that aluminum cans and plastic bottles can be added to the program at the beginning of the school year, 8/06.

The committee would like to see the county utilize the existing mobile learning center offered by LOS Regional Council. It needs coordination and funding, \$1,700 per year. Again, a county recycling coordinator is necessary to help work with the above mentioned school recycling initiative.

Re: County Office Building Recycling

This issue is complex due to the way the county buildings are geographically spread out, and the fact that many offices will be shifting as soon as the new Human Services building is opened. More moves will occur when the Old Courthouse is ready.

The committee recommends starting recycling in the largest buildings first, those that house the most county personnel: the Cty Administration building, Human Services building, Health Department building, new Courthouse and Jail, EMS, and Land Development building. Get these up and running with recycling and then add on departments.

Since the Human Services Building will need to be contracted for garbage service, it may be a good time to send out for bids for both garbage and recycling removal for all county buildings. GDS, the company that currently provides the garbage removal for most of the county buildings, is submitting an estimate for adding recycling service. There will be other costs involved for bins and possible retrofits for custodial equipment.

Again, one of the most important things to do, to get county buildings online with recycling, is to hire a full-time recycling coordinator to work on the project.

Education Budget: \$50,000

Respectfully submitted, Katie Breckheimer

SPECIAL WASTES

This portion of the report was developed by Tom McCullough, Chair of the subcommittee for study of special wastes. Subcommittee members included Stan Kumor and Dave Lowles.

Subject: Household Hazardous Waste (HHW) and Electronics Recycling

One company that I have worked with that can provide HHW and electronics recycling for Henderson County is Ecoflo, Inc, based in Greensboro (2750 Patterson St, Greensboro, NC 27407). Contact: Mr. Ken Northrop (Vice President (336) 855-7925 or e-mail knorthrop@ecoflo.com)

They have a full Part B Hazardous Waste Permit and do collection programs for the City of Greensboro, for both HHW and electronics. Locally, they are working with Coats North America in Laurel Park to recycle 50,000 lbs of obsolete dyes.

I have been working with Mr. Ray Strauss at Ecoflo (336) 558-5441 who has been directly involved with preparing a proposal for Henderson

County. Ecoflo proposes 75 cents/pound labor and materials and mobilization fee of \$1,500. They would do as many as needed or wanted and would also come to present their proposal. Ray says for a 98,000 population base, they would expect an event to have 200 cars with an average of 35 lbs. HHW per vehicle and 10 lbs. electronics per vehicle. They will do HHW and electronics collection at the same time. They do two events per year for the City of Greensboro, serving 400,000 people.

I have also spoken with Ron Townley with the Land-of-Sky Regional Council. He has additional input for HHW/Electronic service companies that may be more economical. This week he will be at the Carolina Recycling Conference in Raleigh. He will contact you when he returns with additional information.

Note:

The SWAC felt that the best approach to handling household hazardous waste and electronics would be to contract special events to be held once or twice per year. Based on the estimates we would expect to receive about 45 lbs per vehicle and 200 vehicles per event for a total of 9,000 lbs. At a cost of \$.75 per pound this would run approximately \$6,750 plus the \$1,500 mobilization fee. Each event would run about \$8,250.

SWAC would propose a budget of \$20,000 per year to hold two events.

COLLECTION

This portion of the report was developed by Jim Phelps, Chair of the subcommittee on collection.

SOLID WASTE ADVISORY COMMITTEE

REPORT OF SUBCOMMITTEE ON HOUSEHOLD RECYCLING

This subcommittee, consisting of SWAC members Terry Maybin and Jim Phelps, in conjunction with members of the Ad Hoc Committee for Recycling Reform, Mike Mynatt and Chuck Breckheimer, and assisted by Gary Tweed, Henderson County Engineer, studied and reviewed several household recycling alternatives for Henderson County. After considerable discussion and analysis of available options for the recycling of household waste, the subcommittee decided on the following proposal as being the most practical and cost effective as well as being the most likely to succeed of all the plans considered.

PROPOSAL FOR RECYCLING HOUSEHOLD WASTE

It is the recommendation of this subcommittee that Henderson County adopt a countywide curbside blue bag recyclables collection system. Items to be recycled would include plastic bottles coded 1 or 2, glass bottles, aluminum and steel cans, newspapers, cardboard, and mixed paper. This system calls for the blue bags to be picked up every two weeks by a single operator contracted by the County for this purpose. The contractor responsible for the collection of these bags would be responsible for all equipment necessary to do so and to haul the collected bags to a recycling center. The cost of this service, including the pickup, handling, and recycling, is estimated at approximately \$1.60 per household in the County per month. This cost could be recovered by assessing an annual Recycling Fee that would be billed on the annual County real property tax bill.

This system has the following benefits: it does not disturb the current system of waste haulers in the County, it requires no capital expenditures by the County, and it offers the best chance of maximum participation by County residents.

The full Solid Waste Advisory Committee has endorsed this proposal.

We highly recommend the County Commissioners endorse and adopt this proposal.

Note:

This subcommittee obtained pricing from Curbside Management on running a curbside blue bag collection program in the unincorporated areas of the County. They're pricing of \$1.60 per household per month is based on 30,000 households with up to 50% participation and once every two-week collection. The annual budget for this program would be \$576,000. (\$48,000 per month) This is a flat fee paid to the contractor by the county monthly regardless of the number of households collected. If participation rate goes above 50% then the costs would go up due to the increase in collection costs. The contractor is responsible for collection and transport to a material recovery facility. None of this material would come through the County's Recycling Center. The annual budget for this type program is projected at \$576,000.

RECYCLING CENTER

The current recycling center at the Henderson County Solid Waste Management Facility on Stoney Mountain Road would remain in operation for a period of time to determine the need for the center. Should the County wide curbside collection program be very successful resulting in a drop of use of the recycling center, then this center could be eliminated. Since there are no fees collected for the use of the center and costs incurred for the disposal of waste in the bag for bag program, the current costs for this center is approximately \$100,000 per year. This cost would be budgeted as a portion of the total recycling program and funded by the household fee.

SUMMARY OF PROGRAM ELEMENT COSTS AND FUNDING

ELEMENT	ANNUAL COST
ADMINISTRATION	
Recycling Coordinator	\$65,000
EDUCATION	
Various Programs, Schools, Brochures, Events, County Office Programs	\$50,000
COLLECTION	
County area Blue Bag collection, every 2 weeks 30,000 households with up to 50% participation	\$576,000
SPECIAL EVENTS	
Electronics/Household Hazardous 1 to 2 events per year	\$20,000
COUNTY RECYCLING CENTER	
Continued annual operation, bag for bag program	\$100,000
TOTAL ANNUAL COSTS	\$811,000
HOUSEHOLDS	30,000
COST PER HOUSEHOLD	\$27/YR
	\$2.25/month

Proposed funding would be through an annual recycling fee of \$27 per household collected on the annual property tax bill. This has been based on 30,000 households in the unincorporated areas of the County. Should municipalities wish to join in this effort the number of households would increase and costs for most elements would increase and fee would have to be adjusted accordingly.

Memo

To: Steve Wyatt
Justin Hembree
From: Gary T. Tweed, P.E.
Date: 4/25/2006
Re: SWAC Report on Recycling Program Upgrades

Over the past several months the Solid Waste Advisory Committee (SWAC) has been evaluating several improvements to the County's Recycling Programs. The SWAC was charged by the Board of Commissioners to undertake this study in response to a request for upgrades to recycling by the Ad Hoc Committee for Recycling Reform. The SWAC was to study the request by the Ad Hoc Committee, to make recommendation on improvements, and to develop a method for funding any recommended improvements. The attached report outlines the SWAC recommendations. It recommends the development of a recycling program that contains 5 elements, Administration, Education, Collection, Special Waste Collection, and Continue Operation of Existing Recycling Center. The funding mechanism for this program is through an annual household recycling fee. Having worked very closely with the SWAC during this process, it is felt that they have accomplished their task as directed by the Board of Commissioners. I was requested to outline any other options that might exist for the collection of household recyclables and improvements to the recycling program. My thoughts are as follows:

EXISTING SOLID WASTE PROGRAM AND ENTERPRISE FUND

The existing solid waste program for Henderson County is operated as an enterprise fund system. There are no general county property revenues used in this program. The fund receives revenue primarily from the tip fees charged as solid waste material enters the Solid Waste Management Facility on Stoney Mountain Road. All aspects of the program generate revenues that cover the costs except the recycling center. This center allows for the free disposal of recyclables and allows an equal amount of waste at no charge. We do receive small revenue on the sale of recyclables but this does not cover the center's operating expenses. The net loss from the center is about \$100,000 per year. The use of the enterprise fund system was started back in the early 90's. Using this enterprise fund system with the free use of the recycling center, does not give the County any financial incentive to increase recycling programs. In order to expand recycling programs, a mechanism for funding recycling must be developed.

OPITIONS FOR EXPANDING RECYCLING COLLECTION

There are basically four options available for the development of a countywide recycling collection system.

- 1- The SWAC is recommending a curbside blue bag program. The SWAC obtained pricing from Curbside Management in Woodfin. Curbside runs similar programs in several municipalities in the region including Hendersonville and Fletcher. Curbside is paid a flat fee by the unit of government to offer the curbside recycling service. The municipalities, since they provide waste collection, have a financial incentive to run recycling collection services; they avoid the County tip fee by diverting recyclables. Curbside estimates that for the unincorporated area of Henderson County with 30,000 households that they could run a once ever two week collection service for household recyclables for \$1.60 per month. This is based on up to a 50% participation rate or they would collect up to 15,000 households. There charge would be \$576,000 per year or \$48,000 per month. The advantage of this type program is that it is totally under the operation of a private contractor and that the County would not be handling any of the material. The County would just be responsible for collecting the annual household fee and paying the contractor. The disadvantage is that it will be hard to develop good participation. The program would be totally voluntary and since homeowners would still be paying a waste hauler for trash collection, there would be little incentive for the homeowner to participate. For the program to be successful, there will have to be extensive education and promotional activities to grow the program. However, this concept developed by the SWAC is workable and is an available option. This option exists because we have one vendor, Curbside Management, that is willing to collect blue bags and process this material at its material recovery facility (MRF). Under this option it is felt that only an additional 2,000 to 3,000 tons of recyclables would be collected. At a cost of \$576,000 this works out to \$192 per ton.
- 2- Another option for collection would be to construct additional convenience centers in the County for the collection of recyclables. Costs for these centers are high with construction costs in the order of \$500,000 and annual operating expenses could run \$200,000 per year. Just having the centers does not complete the system. The County would have to have a transfer center available for the receipt of material, and then transfer these materials to a MRF. Our current center at the Solid Waste Management Facility operates by storing materials in roll off containers, and then periodically transferring these to a tractor-trailer for shipping to a MRF in Greenville, SC. The addition of other centers, with the County running these centers, would require additional facilities and personnel to manage the system. The cost for such a system would be far higher than the curbside program recommended by the SWAC and should not be considered. If we built three additional centers our capital outlay would be in excess of \$1,500,000. Annual operating expenses would approach \$600,000. The amount of material collected including current center would be about 3,000 tons per year. Figuring \$600,000 in operating expenses and \$200,000 per year to cover debt service on capital expenditures, the cost would be about \$266 per ton. This is higher than option one and a lot less convenient for the homeowner since they would have to bring materials to the centers. This option should not be considered.
- 3- One option would be the franchising of the solid waste collection. This option was considered in the late 90's. The Board of Commissioners at that time were requested to study franchising by the Solid Waste Haulers Association (no longer in existence). Hauling companies were being bought by larger companies and the Association felt that franchising should be considered. After a lengthy study and with the companies down to 8, the Board did not accept the recommendation to Franchise the Solid Waste Hauling system. A franchise system would allow the Board of Commissioners to implement a county wide recycling program as part of the franchise. Buncombe County operates under this system today. Buncombe County issues one franchise for the entire unincorporated area and requires the vendor to offer blue bag recycling services. The cost for the homeowner is \$13 per month including recycling services. Today Henderson County households pay \$15 to \$20 per month just for trash collection. Only one hauler, GDS, offers a blue bag recycling service for an extra fee. So under a franchise system, the homeowner should pay less

for trash collection and recycling services. The downside of this approach is that currently we have approximately 30 companies offering household collection. To franchise the system now would require this to be forced by the Board of Commissioners and ultimately would be putting some of the smaller companies out of business.

- 4- The last option to consider is to look at encouraging or requiring existing haulers to offer blue bag service. Currently there is one hauler in the system, GDS that offers curbside blue bag recycling services. They are collecting about 4 tons per week of recyclables and transport these to Curbside Management for processing. Curbside charges GDS \$20 per ton for the blue bags. With our tip fee at \$47.91, GDS saves money by offering the recycling service. Even considering their cost to transport recyclables to Curbside, they are saving tip fees of about \$20 per ton. Any of the haulers could offer the same service, but since most haulers have only single compartment trucks, they are reluctant to do so. GDS runs two compartment trucks, which they developed as part of the franchised system in Buncombe County. Thus they were able to offer the blue bag service in Henderson County without modifications to equipment. Expanding the use of our current waste haulers to offer blue bag recycling could be considered.

OTHER RECYCLING PROGRAM UPGRADES

The SWAC report also makes recommendations on other elements to the recycling programs, Administration, Education, Special Wastes, and existing Convenience Center. My thoughts on these elements are as follows.

Administration - Ultimately if the County wishes to expand its recycling programs there will be a need for a program administrator or recycling coordinator as recommended in the SWAC report. This staff person would be responsible for developing all of the aspects of the program. Funding for this position should be outside the solid waste enterprise fund either from the general fund or through the annual household fee recommended in the SWAC report.

Education - To have a successful recycling program, education is probably the most important function. The recycling coordinator with the cooperation of the schools and other civic groups would have to highly promote an expanded recycling program to grow its participation. Again funding for education would have to be outside the solid waste enterprise fund either from the general fund or through the annual household fee recommended in the SWAC report.

Special Wastes - The SWAC report recommends holding collection events once or twice per year for household hazardous wastes and electronics. The events would be through a contractor hired to hold the events. This is basically how we held the electronics-recycling event last year. In this event the costs were held low by use of volunteers and Solid Waste Dept staff. In future events all work would be performed by the contractor. It is proposed to pay for these events through the annual household fee. It would be the responsibility of the recycling coordinator to organize these events.

Existing Recycling Center - The SWAC report recommends that the current recycling center remain in operation. This center currently ships material to a dual stream MRF belonging to FCR in Greenville, S.C. We collect fiber and containers in roll off containers and when we have enough containers to fill a tractor-trailer, the material is transferred to the trailer and shipped to FCR. Should a county-wide curbside program be developed and the use of the center be reduced, then the existing center could be discontinued. Operation of the center could be funded by the annual household fee or a user fee at the facility. Continued funding of the center by the enterprise fund is not recommended. There should be no free disposal of trash.

SUMMARY

To make a recommendation on which approach should be followed to improve recycling programs is very difficult. There are many aspects that have to be considered. The most successful programs are those where there exists a material recovery facility nearby. Our only two MRFs, Curbside in Woodfin, and FCR in Greenville, are far enough away that it makes it difficult for existing haulers to use these facilities. Past efforts to have a MRF in the area have been unsuccessful. The most convenient and cost effective recycling program for homeowners is to have the materials collected at the curb at their home. It is felt that the best approach to achieving curbside recycling collection is through the franchising of solid waste collection, however, this approach would be disruptive to current hauling companies. The use of convenience centers are too costly and not very effective. If franchising is not possible, then the program outlined by the SWAC could be considered or a program that utilizes our existing haulers requiring them to offer recycling services.

RECYCLING VOLUMES AND COSTS

FY	HENDERSON COUNTY		HENDERSONVILLE		FLETCHER		LAUREL PARK	
	TONS	\$/TON	TONS	\$/TON	TONS	\$/TON	TONS	\$/TON
97-98*	5451	55	436	343	168	150	128	77
98-99**	3255	22	504	297	182	111	104	95
99-2000	2747	36	517	290	182	111	110	102
2000-2001	4072	25	520	144	144	139	130	87
2001-2002	4433	22			216	98	135	89
2002-2003	4378	23	594	128	121	362	109	110
2003-2004	4313	23	562	143	305	151	78	155
2004-2005	3373	29	602	162	312	154	80	153
2005-2006	4000	25 EST.						

*2768 OF 5451 BY MRF, SUPPORT FEE OF \$200,000, INCLUDES COMMERCIAL CARDBOARD

**MRF CLOSED, MARKET ST. CENTER CLOSED, COORDINATOR MOVED TO PLANNING