



REPORT

MOORE COUNTY SOLID WASTE MANAGEMENT PLAN

2012 Plan Update

Submitted To: Moore County Public Works
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EXECUTIVE SUMMARY

INTRODUCTION

This comprehensive Solid Waste Management Plan (Plan) discusses the current solid waste practices used within Moore County (County) and possible changes that can be made to improve solid waste management and to reduce solid waste generation over the ten-year planning period. This document has been updated to reflect changes since the Plan adoption in 1997. This 2012 Update will cover the planning period from July 1, 2012 to June 30, 2021. Plan updates will follow every three years to allow for improvements and continuous monitoring of the Plan implementation. The planning area includes the County and the following municipalities: Aberdeen, Cameron, Carthage, Foxfire, Pinebluff, Pinehurst, Robbins, Southern Pines, Taylortown, Vass, and Whispering Pines.

PLANNING AREA GOALS

The County's long-term goal is to help reduce waste generation within the County and participating municipalities. The County hopes to educate the community and make solid waste disposal and reduction easy and accessible to prevent improper waste disposal and protect public health and the environment. These goals are summarized below:

- Goal 1 – To increase recycling, reuse, and reduction within the County and municipalities to help meet local waste reduction goals.
- Goal 2 – To decrease improper waste disposal.
- Goal 3 – To protect public health and the environment.
- Goal 4 – To educate the community on proper solid waste management and available waste disposal.

WASTE QUANTITIES AND COMPOSITION

The County and its municipalities disposed of approximately 76,837 tons of waste in Fiscal Year (FY) 10-11 (Source: North Carolina Division of Waste Management) not including yard debris or recyclables. The County and municipalities actually managed a total of approximately 101,564 tons of waste including recyclable (5,460 tons) and yard waste (19,266 tons) materials that were diverted from landfilling. Of the total tons of waste managed for the County, it is estimated that approximately 38 percent is residential waste, 31 percent non-residential waste, and 31 percent is construction and demolition (C&D) waste.

WASTE REDUCTION GOALS

In 2006, the County established a local waste reduction goal of 8 percent to be reached by FY 2015-16 and a further goal of 10 percent to be reached by FY 2018-19. Based on current and projected solid waste activities, resources, population, and economic growth, the goals set may be accomplished. However, this goal has not been changed during this Plan Update because of the dramatic effect the



economy has had on waste disposal rates and recycling programs. The waste reduction goal of 10 percent that was established for FY 2018-19 remains the waste reduction goal for 2021-2022. To achieve the local goal of 10 percent per capita waste reduction in FY 2021-22, the County must reduce its per capita disposal rate from the baseline rate of 1.23 tons to 1.11 tons per capita. With the new per capita rates, the County would need to divert 11,840 tons of future waste from the landfill resulting in a final disposal of 109,517 tons for FY 2021-2022.

ASSESSMENT OF PROGRAMS AND PROPOSED ACTIONS

The County does not provide individual household or commercial waste collection services; however, citizens can drop off their waste at the seven recycling/waste collection centers operated by the County. Waste generated within the planning area is collected and hauled by the municipalities or private firms including Waste Management, Inc., Republic Services of NC, LLC, American Waste Systems, and Roberson Unique Sanitation. Those citizens not served by a municipality or who choose not to contract with a private collection firm dispose of waste through the County-operated collection centers. The County and the municipalities of Aberdeen, Pinehurst, Southern Pines, Vass, and Whispering Pines recycled a total of 5,400 tons of residential waste during FY 2010-11. The municipalities of Cameron, Carthage, Foxfire, Pinebluff, Robbins, and Taylortown do not currently sponsor any recycling programs. Residents living in these areas can drop off recyclables at nearby County collection centers.

In order to meet and exceed the waste reduction goals established, the County will increase its efforts to educate the public on the need for waste reduction and encourage the use of the existing recycling programs available. Since the adoption of the 2009 Plan Update, the County has added electronics waste collection along with clothes and books recycling to the services offered at all of their recycling/waste collection centers.

The North Carolina Cooperative Extension Service, which has worked closely with the County on a number of projects, has offered its assistance to provide education to County residents through the extensive programs that it currently provides. A Pesticide Disposal Day sponsored by the Extension Service is an annual event in the County.

Keep Moore County Beautiful (KMCB) has committed to continue its support of the goals through the education of the citizens of the County on proper solid waste management and available waste disposal options. Additional litter prevention programs and plans will also be held within the schools and area businesses. KMCB will continue to promote the mixed paper, telephone book, and Christmas tree recycling programs. There are six mixed paper recycling drives throughout the year. A campaign to ensure that all special events throughout Moore County is in place with the recycling of all plastic bottles and aluminum cans.



Through these efforts, the County and the municipalities are making progress towards meeting the goals established within this Solid Waste Management Plan utilizing, to the fullest extent, the existing programs currently in operation.



1.0 INTRODUCTION

In accordance with North Carolina General Statute 130A-309.09A(b), this document updates the Solid Waste Management Plan Update that was adopted by Moore County and its municipalities in June 2006. The sections of the 2006 Plan Update have been revised to reflect modifications for this Three-Year Solid Waste Management Plan Update (2012 Plan Update) and are ordered as listed in the General Statute.

This comprehensive Solid Waste Management Plan Update discusses the current solid waste practices used within the County and possible changes that can be made to improve solid waste management and reduce solid waste generation over the next ten years. Plan updates will follow every three years to allow for improvements and continuous monitoring of the Plan implementation. The planning area includes Moore County and the following municipalities: Aberdeen, Cameron, Carthage, Foxfire, Pinebluff, Pinehurst, Robbins, Southern Pines, Taylortown, Vass, and Whispering Pines.

Moore County's long-term goal is to help reduce waste generation within the County and its participating municipalities. By increasing recycling, reuse, composting, and mulching, the County can help the state achieve its waste reduction goal. Moore County also hopes to educate the community and make solid waste disposal and reduction easy and accessible to prevent improper waste disposal and protect public health and the environment. These goals are summarized below.

1.1 PLANNING AREA GOALS

- Goal 1 – To increase recycling, reuse, and reduction within the County and its municipalities to help meet local waste reduction goals.
- Goal 2 – To decrease improper waste disposal.
- Goal 3 – To protect public health and the environment.
- Goal 4 – To educate the community on proper solid waste management and available waste disposal options.



2.0 GEOGRAPHIC AND SOLID WASTE STREAM EVALUATION

2.1 GEOGRAPHICAL AREA

This Solid Waste Management Plan Update covers Moore County and its 11 municipalities. According to records maintained by the North Carolina Office of State Budget and Management, the total County population increased by approximately 5.8 percent between July 2004 and July 2007. Population distribution within the County, as estimated in July 2010, is shown in Table 2-1. As indicated in Table 2-1, over half of Moore County's residents continue to live in unincorporated areas.

Towns & County	Population
Aberdeen	6,350
Cameron	285
Carthage	2,205
Foxfire	902
Pinebluff	1,337
Pinehurst	13,124
Robbins	1,097
Southern Pines	12,334
Taylortown	722
Vass	720
Whispering Pines	2,928
Moore County – Unincorporated Areas	46,243
TOTAL	88,247
<i>Source: U.S. Census Bureau, 2010 Census.</i>	

2.2 WASTE STREAM EVALUATION

For this 2012 Plan Update, residential waste refers to waste generated by individual households and multi-family dwellings. Waste generated from commercial, industrial, and institutional activities will be termed non-residential waste. Construction and Demolition (C&D) waste is waste generated from construction activities and is handled separately from non-residential waste. A portion of the land clearing and inert debris (LCID) generated within the County is disposed in the Moore County C&D Landfill and will be included in the C&D waste tonnages.

In FY 2010-11, Moore County and its municipalities disposed of approximately 76,837 tons of waste (Source: North Carolina Division of Waste Management), not including yard debris or recyclables. The County and municipalities actually managed a total of approximately 101,564 tons of waste including recyclables (5,400 tons) and yard waste (19,266 tons). An estimate of the waste disposed by sector is





shown in Table 2-2. These calculations are based on data from the Annual Solid Waste Reports for FY 2010-11 submitted to the North Carolina Division of Waste Management on behalf of or by local governments represented in the Moore County Solid Waste Management Plan.

Type of Waste	Tons	Percent of Waste Stream
Residential	43,609	43%
Non-Residential	36,563	36%
C&D	21,392	21%
TOTAL	101,564	100%

Source: Annual Solid Waste Reports for FY 2010-11.

There is no current study of the residential waste stream components available for Moore County. Therefore, state estimates taken from Volume 1 of the North Carolina Recycling and Solid Waste Management Plan on the percents of various materials in residential waste along with EPA's 2007 MSW Facts and Figures were used to complete Table 2-3. Since Moore County is not a predominately industrial county, it has been assumed since the County's 1997 Plan that non-residential waste, primarily generated by commercial and businesses in the County would be comparable to the residential waste composition. Therefore, the residential waste composition percentage estimates presented in the state's plan, in conjunction with the EPA, were used to determine the breakdown of tonnages generated by both the residential and non-residential sectors of the County.

The methodology used in the County's previous plans has been replicated to estimate the tonnages of various components of the residential and non-residential waste stream managed by the County in FY 2101-2011. As shown in Table 2-3, the amounts of various materials in the waste stream were calculated using the estimated 43,609 tons of residential and 36,563 tons of non-residential waste that the County and municipalities managed in FY 2010-11 county-wide. Paper and organic material are the largest components of the residential and non-residential waste stream.



**Table 2-3
ESTIMATE OF RESIDENTIAL AND NON-RESIDENTIAL WASTE COMPOSITION**

Material	State Estimate¹	Estimated FY 2010-11 County Tons Managed
Paper	31%	24,853
Cardboard	6%	4,810
Plastics	10%	8,017
Yard Waste/Organics ²	28%	22,448
Textiles	4%	3,207
Glass	8%	6,414
Aluminum	1%	802
Ferrous Metal	6%	4,810
Non-Ferrous Metal	1%	802
Miscellaneous ²	5%	4,009
TOTAL	100%	80,172

1. Source: North Carolina Recycling and Solid Waste Management Plan, 1992, Volume 1, pages 6-17

2. Revised to reflect Moore County's conditions.

Due to the large number of golf courses within Moore County (43 courses), the amount of yard waste generated in the County is well above the average for most counties. Therefore, the category for yard waste was increased to be more reflective of conditions.

A large portion of the non-residential waste stream consists of the business and commercial enterprise within the County. The industrial sector consists of the major manufacturers listed in Table 2-4 along with the primary products produced. The most common, non-residential wastes being disposed are paper and packaging by-products.



**Table 2-4
NON-RESIDENTIAL (INDUSTRIAL) WASTE GENERATORS**

Area	Manufacturers	Major Products
Aberdeen	Aberdeen Fabrics, Inc	Fabrics for technical applications
	Advanced Cutting Technologies	Water cutting and laser engraving
	Erico, Inc./Eritech Incorporated	wiring devices/lightning rods
	Gulistan Carpet, Inc.	carpets, rugs, and floor covering
	Industrial Metal Products, Inc.	barn hardware (hinges, latches, etc.)
	International Tray Pads & Packaging	meat/produce tray pads/packageing
	Kolcraft of North Carolina	furniture
	Longleaf Collection, LLC	standard and custom manufactured door and bath hardware
	Meridian Kiosks, Inc.	kiosk manufacturer
	Minuteman Power Boss, International	service industry machines/scrubbers
	Nanofiber Industries	polymeric nanofibers
	Nolarec Lighting / Ceralon Mfg.	ceralon lamps
	PACE, Inc.	industrial soldering equipment
	Pinnacle Furnishings	casino furniture
	Plastic Packaging, Inc.	plastic film / bags
	Royal Threads, Inc.	apparel and embroidery
Rowland Tool & Die	tool and die services	
Thermal Metal Treating, Inc.	metal heat treating, coatings	
Vinyl Windows & Doors	vinyl windows, doors, cupolas, etc.	
Carthage	MMC Textiles LLC	equipment for the textile industry
Pinebluff	ATEX Technologies, Inc.	engineered medical textiles
	BRS Defense	whole-aircraft recovery systems
	McMurray Fabrics Incorporated	fabrics
Pinehurst	FirstHealth of the Carolinas	medical services
	Pinehurst Blacksmith Shop	ironworks
	Pinehurst, Inc.	tourism/hotel/resort
	ProTech Powder Coating	powder coating services
Robbins	American Growler	off-road military vehicles
	Holmes Building Systems	modular homes
	Purvis, N.G. Farms, Inc.	prepared feeds for animals and fowl
Southern Pines	Calco Enterprises	Metal fabrication
	Epic Enterprises, Inc.	textile machinery replacement parts
	Fletcher Industries, Inc.	yarn processing, winding and weaving machinery
	Hamilton Beach/Proctor-Silex, Inc.	appliances
	Ingersoll-Rand Co.	hand tools
	Scribner Associates, Inc.	tools for electrochemical research and development
	Smithson, Inc.	quilts, bedspreads, draperies, sewing services
	Taper International, Inc.	manufacturer of handcuffs
Vass	Carolina Crate & Pallet, Inc.	wooden crates, pallets, boxes, skids, etc.
West End	Longworth Industries, Inc.	acclimate fabrics (polar-max)

Source: Moore County Partners In-Progress





3.0 LOCAL WASTE REDUCTION GOALS

Moore County and its municipalities established a local waste reduction goal of 8 percent to be reached by FY 2015-16 and a further goal of 10 percent to be reached by FY 2018-19. Due to the dramatic effect the economy has had on waste disposal rates and recycling programs, the recycling goal remains 10% to be reached by 2021-2022. These goals were established by the County and its municipalities to set a realistic and meaningful plateau that can be reached with increased participation by all citizens. Based on past reduction levels within the County, the 40 percent goal established by North Carolina General Statute would be unattainable without the addition of extensive programs. Currently, neither the County nor the municipalities have the funding available to implement these programs. The goals established reflect the waste reduction possible by initiating the programs outlined in this 2012 Plan Update.

By examining population estimates and past waste disposal figures, the waste reduction goals can be converted from percents to tons diverted. The baseline year (FY 1991-92) disposal rate was 1.23 tons per capita. This tonnage per capita figure was calculated using demographics information provided by the North Carolina Office of State Budget and Management and waste tonnage information provided by the County. At this per capita disposal rate, the County would dispose of 118,483 tons in FY 2015-16 and 121,357 tons in FY 2021-22 (see Table 3-1).

**Table 3-1
TEN-YEAR WASTE POPULATION PROJECTIONS**

Year	Population	Waste Disposal	Per Capita Disposal Rate
Baseline Year, 1991-92	60,083	74,061.56	1.23
Year	Projected Population	Projected Waste	
FY 2015-16	96,328	118,483	
FY 2021-2022	98,664	121,357	

Source: Population figures from Office of State Budget and Management, baseline year waste tonnage from N.C. Division of Waste Management.

To achieve the ten-year goal of 10 percent per capita waste reduction in FY 2021-22, the County must reduce its per capita disposal rate to 1.11 tons (see Table 3-2). With this new per capita rate, the County would need to divert approximately 11,840 tons of future waste from the landfill resulting in a final disposal of approximately 109,517 tons for FY 2021-22.





**Table 3-2
TARGETED WASTE REDUCTION, FY 2018-19**

Calculations	FY 2015-16	FY 2021-22
1. Baseline year per capita disposal rate (FY 1991-1992 unless alternate approved by Section)	1.23	1.23
2. Percent waste reduction goal	8%	10%
3. Targeted per capita disposal rate (Subtract line 2 from 1.0 and multiply result by line 1)	1.13	1.11
4. Estimated population for July 2015 and July 2018. (Available at http://demog.state.nc.us/ under the link: County Projected Annual Populations, 2010-2019)	96,328	98,664
5. Projected tonnage for disposal at baseline disposal rate (Multiply line 1 by line 4)	118,483	121,357
6. Targeted annual tonnage for disposal (Multiply line 3 by line 4)	108,851	109,517
7. Targeted annual tonnage to reduce (Subtract line 6 from line 5)	9,632	11,840

It should be noted that, exclusive of yard wastes, the per capita disposal rate for 2010-11 was 0.93 tons and the recycle rate was 6.63%. This low disposal rate is likely due to the economy (historically, good economic growth leads to increased waste disposal), an increase in recycling program participation, and a decrease in construction activities.



4.0 MEETING THE WASTE REDUCTION GOALS

With this 2012 Plan Update, and assuming a typical per capital disposal rate, the County will need to reduce its waste by 11,840 tons in FY 2021-22. To achieve these tonnage reductions, the County will target residential, non-residential, and C&D wastes as shown in Table 4-1. The reductions required for each waste type are summarized below, while a detailed description of specific waste reduction activities is given in Section 6.0.

Waste Type	Targeted Tons to Reduce in FY 2021-22
Residential	4,500
Non-residential	3,670
C&D	3,670
GOAL	11,840



5.0 THE PLANNING PROCESS AND PUBLIC PARTICIPATION

Moore County, as the lead agency, contracted with Golder Associates North Carolina, Inc. (Golder) to provide assistance to the County and its municipalities with the development of this three-year update of the County-Wide Solid Waste Management Plan. Correspondence was exchanged between the County staff, each municipality, and Golder collect data, to review the progress made in implementing the 2009 Plan Update, and to determine whether or not this update should contain revisions to the goals and objectives previously established. A public meeting was held June 19, 2012 to receive input on the established Solid Waste Management Plan goals and objectives of the three-year update. The public was notified of this meeting through a legal notice provided to the local print media. Appendix B provides a copy of the public notice. The comments received during the public meeting regarding the development of the Solid Waste Management Plan are also included in the appendix. A listing of those participating in the 2012 Plan Update development is provided as follows:

- Mr. Randy Gould, Public Works Director; Mr. Chad C. Beane, Solid Waste Division Manager, Moore County
- Mr. William R. Monroe, Public Works Director, Town of Aberdeen
- Ms. Carol Lucas, Town Clerk; Mr. Rodney Barber, Public Works Director, Town of Cameron
- Ms. Carol A. Sparks, Town Manager, Town of Carthage
- Mr. George Erickson, Mayor; Ms. Lisa Kivett, Village Clerk, Village of Foxfire
- Mr. J. Stephen Minks, Director of Public Works, Town of Pinebluff
- Mr. Jeff Batton, Assistant Village Manager, Village of Pinehurst
- Ms. Jeffrey Sheffield, Interim Town Manager, Town of Robbins
- Mr. David White, Assistant Town Manager/Public Works Director, Town of Southern Pines
- Mr. Ulysses Barrett, Mayor, Town of Taylortown
- Ms. Jody Smith, Town Clerk, Town of Vass
- Ms. Sue Shuster, Assistant Village Manager/Finance Director, Village of Whispering Pines
- Ms. Joan Neal, Executive Director, Keep Moore County Beautiful
- Mr. Taylor Williams, Agricultural Extension Agent, Cooperative Extension Service



6.0 SOLID WASTE MANAGEMENT METHODS: ASSESSMENT OF PROGRAMS AND DESCRIPTION OF INTENDED ACTIONS

Each solid waste management method is described below as required by North Carolina General Statute 130A-309.09A(b). Each section includes a description of the current program and a summary of intended actions.

6.1 SOURCE REDUCTION

Source reduction is defined as avoiding the creation of waste by reducing the amount or toxicity of waste before it is generated. The County currently practices in-house source reduction such as duplex copying, use of ceramic coffee/tea mugs, use of single-sided copies for scratch pads, use of reusable laser toner cartridges, use of less toxic cleaning supplies, and route memos. There are also no written policies requiring municipal agencies to buy recycled products.

The County has several public programs to help with source reduction such as backyard composting, grasscycling, xeriscaping (planting to reduce grass and leaf generation), enviroshopping, use of non-toxics in homes and businesses, pallet exchange, and a bulk-mail reduction program. The Cooperative Extension Service makes backyard composting demonstration sites available to interested citizens.

The County intends to continue the current source reduction practices and will consider other methods as they become available. The only municipality in Moore County that practices source reduction and has indicated their intentions to continue their source reduction programs is the Village of Pinehurst. Education efforts will continue to encourage those municipalities that do not currently practice source reduction.

6.2 COLLECTION OF SOLID WASTE

Waste generated within the planning area is collected and hauled by the municipalities or private firms including Waste Management, Inc., Allied Waste, American Waste Systems, and Roberson & Barnes Sanitation Service. Citizens who are not served by a municipality or choose not to contract with a private collection firm dispose of their waste through the County-operated system. The County does not provide any individual household or commercial waste collection services; however, through this program, citizens can drop off their waste at the seven recycling drop-off centers free of charge. The following provides a summary of the collection systems provided by the County and each municipality.

6.2.1 Moore County

The County currently operates a successful municipal waste collection program by use of staffed collection centers. The program currently consists of seven collection centers located strategically across the County (see Appendix C). Collection centers are located in Cameron, Robbins, Eagle Springs,



Midway, Carthage/Hillcrest, West End/Seven Lakes, and the Moore County landfill. All seven of the collection centers are staffed and opened throughout the year. The collection centers' hours are Monday through Saturday from 7:00 a.m. to 7:00 p.m. The collection centers are closed on the following four holidays: New Year's Day, Independence Day, Thanksgiving Day, and Christmas Day.

The County intends to continue its current program of solid waste collection through the use of staffed collection centers. Additional collection sites will be considered dependent upon public needs and the availability of suitable sites.

6.2.2 Town of Aberdeen

The Town of Aberdeen provides curbside collection of residential and small business waste twice a week. Citizens are allowed one 95-gallon trash container per pick-up; small businesses are allowed two 95-gallon cans per pick-up. Curbside pick-up of white goods, bulky items, and scrap metals is also provided by the Town upon citizens' requests. All waste that is collected is taken to Uwharrie Environmental Transfer Station. C&D waste is taken to the Moore County Landfill.

The Town of Aberdeen intends to continue with its current solid waste collection program.

6.2.3 Town of Cameron

The Town of Cameron provides curbside collection of residential and commercial waste twice a week. The Town owns a small waste transfer facility with a compactor and roll-off container for storage of the Town's waste prior to transport by Republic Services for disposal. All bulky waste is handled by the citizens. All waste collected by the Town is taken to the Uwharrie Environmental Transfer Station.

The Town of Cameron intends to continue with its current solid waste collection program.

6.2.4 Town of Carthage

The Town of Carthage currently contracts with Republic Services for curbside collection of residential waste once a week. After collection, the waste is taken to the Uwharrie Environmental Transfer Station for transfer and disposal at the Uwharrie Environmental Regional Landfill. Local businesses and industries which require a dumpster for waste disposal contract with private collectors for their solid waste collection and disposal.

The Town of Carthage intends to continue with its current solid waste collection program.

6.2.5 Village of Foxfire

In Foxfire Village, private citizens are responsible for their own waste collection and disposal. There is currently no indication that the Village will take actions to add a solid waste collection program.



6.2.6 Town of Pinebluff

The Town of Pinebluff currently contracts with Roberson Sanitation Company to provide curbside collection of residential waste twice a week. Residents are allowed up to three 30-gallon containers per pick-up. Waste collected is directly hauled to the Uwharrie Environmental Transfer Station for transfer and disposal at the Uwharrie Environmental Regional Landfill. Commercial and industrial generators handle their own solid waste collection and disposal.

The Town of Pinebluff intends to continue with its current solid waste collection program.

6.2.7 Village of Pinehurst

The Village of Pinehurst provides curbside collection of residential waste twice a week. Waste collected by the Village is taken to the Uwharrie Environmental Transfer Station. Bulk waste is collected by special pick-up at citizens' request and taken to the transfer station.

The Village of Pinehurst intends to continue with its current solid waste collection program.

6.2.8 Town of Robbins

The Town of Robbins currently contracts with Republic Services to provide curbside collection of residential waste once a week. In addition, the Town has a drop off site with two available dumpsters for disposal. All residential waste and bulk waste collected in these dumpsters is hauled directly to the Uwharrie Environmental Regional Landfill. Local businesses and industries are responsible for handling their own solid waste collection and disposal.

The Town of Robbins intends to continue with its current solid waste collection program.

6.2.9 Town of Southern Pines

The Town of Southern Pines currently contracts with Waste Management, Inc. to provide backyard collection of residential waste once a week. Service for residential dumpsters and small business or commercial generators of less than 180 gallons per week is also provided twice a week under the contract. Large commercial generators must contract service directly with a hauler. Waste Management, Inc. takes the collected waste to the Uwharrie Environmental Transfer Station.

The Town of Southern Pines intends to continue with its current solid waste collection program.

6.2.10 Town of Taylortown

The Town of Taylortown rents a roll-off container from Republic Services where citizens can bring their own waste for disposal. The container is emptied as needed with the waste being hauled to the Uwharrie Environmental Transfer Station. Bulky waste is not allowed and must be taken to the Moore County



Landfill where it is disposed of at the C&D landfill or the MSW transfer station. Taylortown has had historical problems with illegal dumping from surrounding areas.

The Town of Taylortown intends to continue with its current solid waste collection program.

6.2.11 Town of Vass

The Town of Vass currently contracts with Waste Management to provide curbside collection of residential waste once a week. Residents are allowed one 96-gallon container per pick-up. The waste that is collected by Waste Management is taken to the Uwharrie Environmental Transfer Station.

The Town of Vass intends to continue with its current solid waste collection program.

6.2.12 Village of Whispering Pines

The Village of Whispering Pines currently contracts with Roberson Unique Sanitation to provide backyard collection of residential waste twice a week. All waste collected is taken to the Uwharrie Environmental Transfer Station. Citizens are responsible for their own disposal of bulky items and white goods.

The Village of Whispering Pines intends to continue with its current solid waste collection program.

6.3 RECYCLING AND REUSE

Moore County and its municipalities have provided their residents with the opportunity to recycle components of the solid waste stream since 1991. The following paragraphs provide a discussion on those recycling programs currently offered by the County and municipalities. Programs for the reuse of solid waste materials have not been pursued; and currently, there are no reuse programs within the County sponsored by local governments. The County and municipalities, in conjunction with Keep Moore County Beautiful and the North Carolina Cooperative Extension Service, have continued to educate and inform all residents of the benefits of recycling and reuse practices. It is the intention of the County and the participating municipalities to continue education efforts and consider reuse opportunities as they become available.

6.3.1 Current Program

6.3.1.1 Moore County

The Moore County Public Works Department has operated a successful drop-off recycling program since 1991. The program currently consists of seven collection centers located strategically across the County (see Appendix C). Collection centers are located in Cameron, Carthage/Hillcrest, Midway, Robbins, Eagle Springs, West End/Seven Lakes, and the Moore County Landfill. All seven of the collection centers are staffed and open throughout the year. The collection centers' hours are Monday through Saturday



from 7:00 a.m. to 7:00 p.m. The centers are open with regular hours of operation on all holidays with the exception of being closed on New Year's Day, Independence Day, Thanksgiving Day, and Christmas. Materials collected at these facilities include aluminum cans, cardboard, newspapers, magazines, electronic wastes, and scrap metal. The Moore County Landfill also served as a collection site for the above-mentioned recyclables with the exception of cardboard. Scrap tires and yard waste are also collected at the Landfill site. Mixed office paper is accepted only at the Carthage/Hillcrest and West End/Seven Lakes facility. At the Carthage/Hillcrest site, lead-acid batteries, antifreeze, and used motor oil are accepted. The Carthage/Hillcrest and Cameron sites also accept pesticide containers. Plastics can be recycled at all seven collection centers. The County estimates approximately 50 percent participation in the County recycling program.

The recyclables collected, except for newspapers and magazines, are transported to Wagram Paper Stock (aluminum, corrugated cardboard, and mixed paper), Uwharrie Environmental (corrugated cardboard and plastic), Sandhills Recycling (aluminum), Reflective Recycling, Inc. (glass), and Metal Recycling Services, Inc. (white goods and scrap metal) for preparation and shipment to various markets. Payments are received for recyclables when the markets are up. *Raleigh News & Observer* provides containers and transportation for the collection of old newspapers and magazines. The County receives payment for these items when the market is up.

Another component to the County's recycling program is the proper disposal of pesticide containers. The County used a state grant from the Pesticide Environmental Trust Fund, which was established by the General Assembly in 1993 to establish a program to help reduce toxicity introduced to the environment. The program includes the location of two permanent storage bins at the Carthage/Hillcrest and Cameron sites for the collection of used pesticide containers that have been emptied and cleaned. An education program is administered by the Cooperative Extension Service on the proper disposal methods of pesticide containers.

The County is in the initial stages of permitting a recycling transfer station, which will be constructed using grant funds from the 2012 Community Waste Reduction and Recycling Grant. The transfer station will be located at the existing landfill facility. The County is also in the process of converting all seven collection centers to single stream recycling.

6.3.1.2 Town of Aberdeen

The Town of Aberdeen began providing curbside recycling for glass, mixed plastic, magazines, aluminum cans, steel cans, white goods, other metal, cardboard, office paper, mixed paper, newspapers, and other paper in 2010. These items are put in carts by the residents and placed on the curb for collection every other week.



6.3.1.3 Town of Cameron

The Town of Cameron does not operate, contract, or participate in a recycling program; however, citizens are encouraged to drop-off recyclables at one of the County's recycling convenience centers. The *Raleigh News & Observer* collects and transports all used magazines and newspapers.

6.3.1.4 Town of Carthage

The Town of Carthage does not operate, contract, or participate in a recycling program; however, citizens are encouraged to drop-off recyclables at one of the County's recycling convenience centers.

6.3.1.5 Village of Foxfire

The Village of Foxfire does not operate, contract, or participate in a recycling program; however, citizens are encouraged to drop-off recyclables at one of the County's recycling convenience centers.

6.3.1.6 Town of Pinebluff

The Town of Pinebluff provides curbside recycling for glass, mixed plastic, magazines, aluminum cans, steel cans, white goods, other metal, cardboard, office paper, mixed paper, newspapers, and other paper. These items are put in bins by the residents and placed on the curb for weekly collection.

6.3.1.7 Village of Pinehurst

The Village of Pinehurst provides curbside recycling for glass, mixed plastic, magazines, aluminum cans, steel cans, white goods, other metal, cardboard, office paper, mixed paper, newspapers, and other paper. These items are put in carts by the residents and placed on the curb for weekly collection. The Village of Pinehurst also offers an unmanned recycling center that is open from 8:00 a.m. to 3:00 p.m., Monday through Friday. This site accepts the same recyclable materials collected in the curbside service. Pinehurst has an approximate 45 percent participation in its curbside recycling.

6.3.1.8 Town of Robbins

The Town of Robbins contracts for a weekly curbside collection of recyclables. In addition, citizens are encouraged to drop-off recyclables at one of the County's recycling convenience centers.

6.3.1.9 Town of Southern Pines

In January of 2009, the Town began a curbside collection program. Once a week Southern Pines residents place an 18-gallon bin at the curb with flattened cardboard, magazines, office paper, junk mail, phone books, paperboard, brown paper bags, newspapers, plastic bottles, glass bottles & jars, aluminum cans, aluminum foil, pie tins, steel cans, and empty aerosol cans.



6.3.1.10 Town of Taylortown

The Town of Taylortown does not operate, contract, or participate in a recycling program; however, citizens are encouraged to drop-off recyclables at one of the County's recycling convenience centers.

6.3.1.11 Town of Vass

The Town of Vass does not operate or contract, in a recycling program; however, citizens are encouraged to drop-off recyclables at one of the County's recycling convenience centers.

6.3.1.12 Village of Whispering Pines

The Village of Whispering Pines contracts for weekly backyard collection of recyclables.

6.3.2 Program Assessment

The following municipalities do not currently sponsor any recycling programs: Cameron, Carthage, Foxfire, Taylortown, and Vass. Residents living in these areas can drop off recyclables at nearby County collection centers.

The amount of materials recycled by the County-operated program plus the municipalities of Aberdeen, Pinebluff, Pinehurst, Robbins, Southern Pines, and Whispering Pines are shown in Table 6-1. The County and municipalities recycled a total of 5,400.86 tons of residential waste during FY 2010-11.

Table 6-1 RESIDENTIAL RECYCLING IN TONS, FY 2010-11								
Material	County Tons	Aberdeen	Pinebluff	Pinehurst	Robbins	Southern Pines	Whispering Pines	TOTAL
Glass – Clear	105.91							105.91
Glass – Brown	15.13							15.13
Glass – Green	30.26							30.26
Glass – Mixed								
Mixed Plastics	171.02				.05			171.07
Aluminum Cans	13.40				.05			13.09
Steel Cans	6.16							6.16
White Goods	492.96				.5			493.46
Other Metals	117.08	20.79			.5			138.37
Newsprint	331.79							331.79
Cardboard	371.79							371.79
Magazines	94.93							94.93
Mixed Paper	53.79							53.79
Commingled		530.37	120.08	1,733.8	.5	1,008	353	3,745.75
TOTAL	1,633.22	551.16	120.08	1,733.8	1.6	1008	353	5,400.86

Source: N.C. Annual Solid Waste Management Reports for FY 2010-11.





Table 6-2 shows a comparison of the recycling tonnages presented above for FY 2007-08 and the estimated recyclable tonnages from Table 2-3 for the County. Table 6-2 shows that there is still a majority of the residential waste stream that can be recycled.

**Table 6-2
COMPARISON BETWEEN ESTIMATED TONS AVAILABLE
AND TONS RECYCLED, FY 2010-11**

Material*	Estimated Tons Available	Tons Recycled	Available Processors or Marketers
Paper	24,853	331.79	Raleigh News & Observer/Wagram Paper Stock
Cardboard	4,810	371.79	Metal Recycling Services, Inc./Wagram Paper Stock
Plastics	8,017	171.07	Uwharrie Environmental
Glass	6,414	151.30	Metal Recycling Services, Inc./Lee Iron & Metal/Uwharrie Environmental
Metals	6,414	651.13	Metal Recycling Services, Inc.
*An additional 3,745.75 tons of commingled items were collected.			
Source: Tons recycled derived from Annual Solid Waste Management Reports for FY 2010-11			

The County and municipalities market most of their recyclable materials through Metal Recycling Services, Inc., Wagram Paper Stock, Uwharrie Environmental MRF, Sonoco, Inc., and the *Raleigh News & Observer*. Other markets that become available will be considered.

The County and municipalities experience an approximate 50 percent participation in their recycling programs. The Annual Solid Waste Management Reports for FY 2010-11 submitted to the North Carolina Department of Environment and Natural Resources (NCDENR) showed that the recycling programs Aberdeen, Pinebluff, Pinehurst, Southern Pines, Robbins, and Whispering Pines (all of which have curbside collection) have the greatest levels of community participation. Participation in community recycling programs will need to be increased in order to meet new recycling goals, which could be achieved through educating the public about recycling and increasing the materials than can be recycled at the County's drop-off centers. Areas processing their waste through the Uwharrie Environmental Material Recovery Facility (MRF) could pre-separate glass since glass is not removed for recycling during processing. Cardboard, such as that used in cereal boxes, could also be recycled. Solid waste collection occurring twice a week or more may also discourage recycling.

It is not known how much recycling of non-residential waste is occurring. Small businesses may use the County's collection centers or participate in some municipal curbside recycling programs; however, large companies are encouraged to contract for recycling services. It is known that there is a large amount of recyclable material in the non-residential waste stream.





It should be noted that the County and its municipalities experienced a 153% increase in the recycling rate from the 2009 Plan Update. Increased citizen participation and public education has dramatically increased the amount of residential waste recycled within the County and is expected to aid the County's efforts to meet their waste reduction goals.

6.3.3 Future Objectives

With this waste management plan, the residential recycling programs will have to reduce waste by an additional 6,700 tons by FY 2018-19. To meet this goal, the County and municipalities will continue their current programs and will add additional programs when economically feasible. It is assumed that residents currently using the drop-off facilities will continue to recycle.

6.4 COMPOSTING AND MULCHING

6.4.1 Moore County

Moore County currently conducts mulching of yard and leaf wastes at the Moore County Landfill. Aberdeen, Pinebluff, Pinehurst, Southern Pines, and Whispering Pines provide yard and leaf wastes service that is brought to the Moore County Landfill for mulching. During FY 2010-11, the amount of yard waste generated in Moore County that was managed by means of mulching totaled 19,266 tons. The County utilizes the majority of the generated mulch for boiler fuel.

6.4.2 Town of Aberdeen

The Town of Aberdeen collected a total of 1,557 tons of yard waste for mulching in FY 2010-2011. Yard waste is collected at least every two weeks at the curbside by the Town and is taken to the Moore County Landfill for mulching.

6.4.3 Town of Cameron

The Town of Cameron uses a leaf vacuum to collect limbs and yard waste. The yard waste is then chipped for mulch. Mulch that is produced is made available free to citizens. Cameron produced 11 tons of mulch during FY 2010-11.

6.4.4 Town of Carthage

The Town of Carthage provides curbside collection of yard waste, which is run through a chipper and dropped off directly at citizen's homes that want the mulch. The Town does have a small area set aside for storage, but this is rarely needed since there is a waiting list to receive the chipped product. Carthage produced 95 tons of mulch during FY 2010-11.



6.4.5 Foxfire Village

The citizens of Foxfire Village may drop off their yard waste at a volunteer-manned bin. The yard waste bin is available for about an hour, two times a week. Foxfire village has a contractor who empties the bin.

6.4.6 Town of Pinebluff

The Town of Pinebluff provides curbside collection of yard waste continually throughout the week. All yard waste that is collected goes to the Moore County Landfill. The Town collected 549 tons of yard waste during FY 2010-11.

6.4.7 Village of Pinehurst

The Village of Pinehurst collects yard waste on Mondays and Fridays from the first week in March through the second week in December and on Mondays from the third week in December through the last week in February. This service is not available to remove debris generated from site clearing or preparation associated with building construction. During FY 2010-11, the Village reports that 1,223 tons of yard waste was taken to the Moore County Landfill for mulching.

6.4.8 Town of Robbins

The Town of Robbins provides curbside collection of yard waste, which is chipped into mulch and given to citizens for their use. During FY 2010-11, the Town collected 2,486 tons of yard waste.

6.4.9 Town of Southern Pines

The Town of Southern Pines provides curbside collection of yard waste approximately every two weeks. The yard waste is taken to the Moore County Landfill for mulching. Approximately 3,470 tons of yard waste was collected in Southern Pines during FY 2010-11.

6.4.10 Town of Taylortown

The Town of Taylortown does not provide mulching or composting services to its residents.

6.4.11 Town of Vass

The Town of Vass collects yard waste from residents once a week, which is chipped and grounded for mulching. The final mulch product is dropped off at citizens' homes; however, there is a waiting list to receive the mulch. During FY 2010-11, the Town generated approximately 30 tons of mulch.

6.4.12 Village of Whispering Pines

Yard waste is collected by the Village of Whispering Pines once a week at the curbside. The yard waste is taken to the mulching facility at the County landfill. During FY 2010-11, the Village collected approximately 438 tons of yard waste.



6.5 INCINERATION WITH ENERGY RECOVERY

Incineration is not part of the current solid waste management program, and the County planning area does not anticipate the use of incineration with energy recovery as a means of future solid waste disposal.

6.6 INCINERATION WITHOUT ENERGY RECOVERY

Incineration is not part of the current solid waste management program, and the County planning area does not anticipate the use of incineration as a means of future solid waste disposal.

6.7 TRANSFER OF SOLID WASTE OUTSIDE OF GEOGRAPHIC AREA

Moore County currently disposes of all residential and non-residential waste outside of the County. Under a contract with Uwharrie Environmental, the County and most municipalities bring their waste to the Uwharrie Environmental Transfer Station prior to disposal. This facility is located at the Moore County Landfill. The County contracts with Uwharrie Environmental to transport all waste brought to the transfer facility to a Subtitle D landfill. Of the 73,734 tons of waste disposed, 51,371 tons were routed through the transfer station in FY 2010-11.

The transfer station is expected to operate indefinitely because it is unlikely that the County will build another landfill.

6.8 DISPOSAL OF SOLID WASTE

Prior to 1993, Moore County operated its own unlined, sanitary landfill within the County to provide disposal of residential waste, commercial waste, yard waste, and C&D waste. With the passing of the Subtitle D regulations for solid waste disposal, the County decided to close its existing landfill and contract for Subtitle D waste disposal service in a regional landfill. The Moore County Landfill stopped receiving waste in October 1993. The County leased land to Uwharrie Environmental for the construction of a transfer station at the current landfill site. The County then entered into a contract with Uwharrie Environmental for disposal of the County's waste at a Subtitle D facility. During the early stages of this agreement, the County's waste was going to several different disposal facilities depending on the municipality. The County required that all its waste be disposed of in a lined facility; and, therefore, the County's waste was hauled to Addington Environmental's East Carolina Landfill in Bertie County, North Carolina. Municipalities opting to dispose of their waste in a non-lined facility, such as Carthage, had their waste taken to the Montgomery County Landfill operated by Uwharrie Environmental in Troy, North Carolina. With the opening of Uwharrie Environmental's lined landfill at the Montgomery County facility, the majority of Moore County solid waste is now disposed of at this site.



Waste from Moore County and its municipalities was disposed in three different facilities during FY 2010-11. A summary of the total waste disposed at each facility is given in Table 6-3.

Facility	Tons Disposed	Areas Contributing
Uwharrie Environmental Regional Landfill	52,328	Moore County, Aberdeen, Pinehurst, Southern Pines, Whispering Pines, Cameron, Pinebluff, Carthage, Vass, Robbins, Taylortown
Moore County C&D Landfill	21,282	Moore County
Uwharrie Environmental MRF	427	Moore County

Source: North Carolina Division of Waste Management 2011 Annual Report

After the Moore County Landfill was closed, the facility was converted to a C&D landfill and has an anticipated operating life of at least 25 years. The facility continues to serve as a disposal site for C&D waste but is also the site of the Uwharrie Environmental Transfer Station, the County's mulching and composting facility, and a drop-off site for recyclables.

Moore County signed a five-year disposal contract with Uwharrie Environmental on September 17, 1993, and renewed the contract for additional five-year extensions in 1998, 2003, and 2008. The five-year disposal contract will expire in 2013. The contract may be extended for further five-year periods at the mutual consent of the County and Republic Services. The County plans to continue with its current methods of handling and disposal of solid waste. Upon completion of the contract period, the County will look at alternative handling and disposal options and determine what is best for the County and its municipalities. Disposal of C&D waste will continue to occur at the Moore County Landfill for the remaining life of the facility.

LCID material is disposed in one of three facilities within Moore County. Private LCID facilities are operated by Winfred Williams in Aberdeen and Alan Casavant on Brinkley Road outside of Carthage. The LCID waste is accepted at the C&D landfill operated by the County. The majority of LCID waste disposed in Moore County is taken by the private facilities since they charge on a volume basis versus a per ton charge at the County facility. The County occasionally reduces or eliminates the tipping fee to assist the municipalities in clean-up efforts following natural disasters and large storms.



7.0 EDUCATION, SPECIAL WASTES, ILLEGAL DISPOSAL, PURCHASING, AND DISASTER RESPONSE: ASSESSMENT OF PROGRAMS AND DESCRIPTION OF INTENDED ACTION

7.1 COMMUNITY AND SCHOOL EDUCATION

The education of the community is an integral part of the success of a County-wide recycling program. The County and its municipalities, in conjunction with the North Carolina Cooperative Extension Service and Keep Moore County Beautiful, have continued efforts to educate and inform all County residents of the importance of solid waste reduction and recycling practices. Educational programs and pamphlets describing the what, where, how, and why of recycling are continually produced and distributed County-wide. Programs are presented to various civic and school groups by representatives of the County, municipalities, Cooperative Extension Service, and Keep Moore County Beautiful (KMCB).

As part of its mission “to enhance the quality of life and community pride of Moore County citizens through improving the public attitude and behavior in handling solid waste, and natural resource conservation, and beautification,” KMCB has continued its involvement in numerous County-wide projects. KMCB will continue to promote and expand mixed paper recycling, clean your files day, telephone book recycling, and Christmas tree recycling programs. The number of mixed paper recycling drives has been extended to six events throughout the year. A campaign to ensure that all special events throughout Moore County is in place with the recycling of all plastic bottles and aluminum cans.

In order to meet and exceed the waste reduction goals established, the County will increase its efforts to educate the public on the need for waste reduction and encourage the use of the existing recycling programs available. The North Carolina Cooperative Extension Service, which has worked closely with the County on a number of projects, has offered its assistance to provide education to County residents through the extensive programs that it currently provides. A Pesticide Disposal Day has been implemented by the Cooperative Extension Service and is now an annual event in the County. Many hazardous and banned chemicals, including DDT, Chlordane, and lead arsenate, were disposed of safely by the North Carolina Department of Agriculture at no charge to the home or business.

Through these efforts, the County and municipalities should be able to readily meet the goals established within this Solid Waste Management Plan utilizing, to the fullest extent, the existing programs currently in operation.



7.2 SPECIAL WASTE MANAGEMENT

7.2.1 Tires

Scrap tires are currently collected free of charge at the Moore County Landfill. It is estimated that 90 percent of the tires collected were passenger tires, 8 percent truck tires, and 2 percent large off-road tires. Collected tires are shipped off-site by Central Carolina Tire Disposal who disposes of them. Moore County has been very active in addressing nuisance scrap tire sites. It is the County's intention to continue this program as nuisance sites are identified and funds are available. The County collected 848.3 tons of scrap tires during the 2010-11 fiscal year.

7.2.2 White Goods

White goods are collected at all of the collection centers and at the Moore County Landfill. The County is under contract with Metal Recycling Services, Inc. to extract and collect the freon gas and ship the white goods for salvage. Under this contractual arrangement, the County receives market price per each ton salvaged. Moore County does not anticipate any changes to the program and intends to continue through the contract term.

7.2.3 Lead-Acid Batteries

The County's Carthage/Hillcrest collection site collects lead-acid batteries, such as those used in automobiles. Residents of the County who wish to dispose of lead-acid batteries must take them to the Carthage/Hillcrest site or to one of the numerous retail outlets located throughout the County. The County will consider the addition of recycling lead-acid batteries at the other recycling centers and will work with the North Carolina Cooperative Extension Service on a program to educate all County residents on the importance of recycling batteries and the dangers of improper disposal. The County collected 181 batteries in FY 2010-11.

7.2.4 Used Motor Oil

In 2001, the County implemented collection of used oil at the Hillcrest/Carthage recycling center and collected 2,298 gallons during FY 2010-11. The County will consider the addition of used oil collection at the other recycling centers and will work with the North Carolina Cooperative Extension Service in the development and implementation of the program. Used oil can also be disposed of at four local businesses within the County, which are Advance Auto Parts (Aberdeen), City Auto Parts (Robbins), Phillips Motor (Carthage), and The Oil Changer (Southern Pines). Southern Pines has one public collection site and collected 50 gallons in FY 2010-11.



7.2.5 Household Hazardous Waste

The County has no household hazardous waste program at this time. However, in conjunction with several municipalities and non-profit groups, the County conducts an annual collection event for household hazardous waste. Keep Moore County Beautiful will continue to promote existing programs for the recycling of Ni-Cd batteries and latex paint..

7.2.6 Abandoned Manufactured Homes

Presently, Moore County has chosen not to implement a plan to manage abandoned manufactured homes. When the County develops a plan for the management of abandoned manufactured homes, a copy will be submitted to the DENR regional office for inclusion in the Solid Waste Management Plan.

The County does accept manufactured homes for disposal at its C&D Landfill for a fee. Manufactured homes are broken down and disposed in the active C&D Landfill.

7.2.7 Electronic Waste

The County implemented an electronics recycling program in December 2010 which is available to all residents of the County. Material to be recycled include, but is not limited to, TVs, computer equipment, scanners, fax machines, copiers, and other miscellaneous electronic equipment. The County is under contract with Creative Recycling, which holds an R2 certification (see Appendix D) to pick up materials for recycling and further disposal as necessary. Information regarding the amount of electronic waste recycled during the 2010-11 fiscal year is not available at this time. In the future, after collection of electronic waste, Creative Recycling will send Moore County a statement listing the tonnage of materials disposed broken down by computer equipment, televisions and other electronic equipment.

Citizens may drop off electronic waste at the Highway 15-501 and Eagle Springs Road convenience sites for recycling. Articles have been placed in the local newspaper informing citizens of the disposal ban on electronic equipment and the recycling options Moore County has established. The County has also posted flyers at each convenience center to inform citizens of the location of collection sites for electronic waste. Signs have been posted at the landfill explaining the new landfill ban on electronic waste and the locations of collection sites.

The electronic recycling program is available to all citizens of Moore County. The County is not, at this time, working with any other local governmental units to provide or receive services concerning disposal of discarded electronic devices. In addition, the County has established a separate line item for the receipt and disbursement of state funding received from the North Carolina Electronics Management Program. State funding received will be used solely for education and supplies necessary to support the County's electronic waste program.



7.3 PREVENTION OF ILLEGAL DISPOSAL AND MANAGEMENT OF LITTER

Moore County's efforts to eliminate illegal dumping of waste includes the holding of a "litter summit," which brings together leaders from the County, municipalities, law enforcement, garden clubs, civil groups, and other agencies. In addition, the County approved funding of a program to clean up the County roadway system utilizing jail inmates. The program includes a special trailer to transport inmates along with tools, supplies, and a portable toilet.

In the area of illegal disposal sites, the Moore County Health Department has primary responsibility in enforcing the County solid waste ordinance. The contact person for the Health Department is the Environmental Supervisor at 910-947-6283. The health inspector works closely with the Sheriff's Department and the regional state solid waste specialists in the investigation, enforcement activities, and site clean-up efforts. For sites in which the landowner is not at fault, the County has provided roll-off containers for the landowner to collect the material. The County provides transportation and disposal of the waste. The County has also utilized "IMPACT" and other Department of Correction services in the clean-up of illegal disposal sites. It is the County's intention to continue with these programs.

The County has an ordinance established, which regulates the development and operation of LCID landfills within the County. This ordinance was implemented to provide greater assurance that privately-owned and operated LCID landfills would not become a nuisance to surrounding neighborhoods or a hazard due to truck traffic on roadways accessing the facility. The County Planning and Zoning Administrator is designated as the administrative official of the ordinance to ensure that proposed facilities meet all state regulations and conform to County planning and zoning requirements.

The Towns of Robbins and Vass sponsor a "Clean-up Week" each year. These annual events allow for disposal of bulk waste material. In Robbins, bulk waste set out by the curb is picked up by the Town and disposed of at no extra cost to the citizens. The Town of Vass utilizes volunteer labor from its citizens to collect bulk waste material, which is deposited into dumpsters provided by their waste contractor. It is the intention of the Towns of Robbins and Vass to continue these programs.

7.4 PURCHASE OF RECYCLED MATERIALS AND PRODUCTS

Although there is no written directive requiring it, the County and several of the municipalities purchase some products with recycled-content materials. Some of the recycled products purchased include copy paper, letterhead paper, envelopes, bathroom tissue, paper towels, ruled pads, file folders, business cards, and remanufactured laser toner cartridges. The County intends to continue the purchase of products with recycled content materials whenever possible.



The County and seven municipalities (Aberdeen, Carthage, Pinehurst, Robbins, Southern Pines, Taylortown, and Whispering Pines) have in-house recycling programs to collect recyclable materials generated during daily operation. Moore County and the municipalities listed intend to continue with their in-house recycling programs. Education efforts will continue in an attempt to encourage other municipalities to join in this effort.

7.5 DISASTER RESPONSE

Moore County has established a an Emergency Operations Plan and a Debris Management Plan (see Appendix E) to facilitate and coordinate the removal, collection, and disposal of debris following a disaster to mitigate against any potential threat to the health, safety, and welfare of its citizens. The Moore County Department of Public Works is responsible for the coordination of efforts for the removal function as it pertains to County property and facilities and for providing debris disposal options to citizens within the County and its municipalities. The primary contact for the Public Works Department is the Director, Mr. Randy Gould, who will be responsible for the coordination with all County and state departments, organizations, and agencies that will be involved with disaster response including:

- Moore County Public Works – Randy Gould, Director 910-947-6315
- Moore County Landfill – Marshall Hicks 910-295-0431
- Moore County Scale House – Wayne Lowe, Weighmaster 910-295-4202
- Moore County Finance/Purchasing – Carrie Neal, Director 910-947-6310
- Moore County Emergency Mgmt.– -Bryan Phillips, Public Safety Director 910-947-6317
- Moore County Fleet Maintenance – Barry Oldham, Supervisor 910-941-2301
- Moore County Sheriff's Department – Lane Carter, Sheriff 910-947-2931
- Moore County Planning/Zoning and Inspections –
Debra Ensminger, Planning and Community Director 910-947-5010
- N.C. Department of Transportation – Sarah Foster 910-947-2233
- N.C. Solid Waste Section – Dennis Shackelford, District Supervisor 910-433-3300
- N.C. Division of Emergency Management –Steve Powers 919-
575-4122 or 800-858-0368
- N.C. Hazardous Waste Section – Jene Walker 919-281-4727
- Carolina Power & Light Company 800-452-2777

In addition, the County has entered into mutual agreements with other counties and municipalities to assist with disaster response. This effort will also be coordinated through the Moore County Public Works Department.





The County has established a list of private contractors who have the capability and qualifications to provide debris removal, collection, volume reduction, and disposal in a cost-effective, expeditious, and environmentally-sound manner following a disaster. Currently, the approved contractors include:

■ Simmons & Simmons, Inc.	David Simmons	910-596-7586
■ Fat Monkey Express	Kenneth Thomas	910-673-6651
■ Johnny Harris Trucking Company	Johnny Harris	910-947-2112
■ Uwharrie Environmental, Inc.	Joe Reynolds	800-676-9696
■ Republic Services	Billy Maness	910-576-3851
■ Metal Recycling Services, Inc.	Will Simmons	704-283-4455
■ Jerry Chesney, Logger	Jerry Chesney	919-499-9285
■ Waste Management, Inc.	Michelle Hunt	910-281-4727

Sample contracts with a menu of services and generic scopes of work are included as part of the County's Debris Management Plan to allow Moore County to expedite its implementation in a prompt and effective manner.

The County's plan also includes the identification of potential staging areas for the storage and processing of debris. The Moore County Landfill located off Highway 5 in Pinehurst will be used as the primary site with an approximate 30-acre area available. Additional areas include former landfill sites as follows:

- 51 acres on Ritter Road outside of Robbins
- 43 acres on Joel Road outside of Carthage
- 26 acres on Carthage Road outside of Seven Lakes

Only the virgin acreage not formerly used for waste disposal would be utilized for staging of disaster debris.

Public properties owned by municipalities within the County would be considered, depending upon the type and event of disaster debris generated by an event. Private property would be the final consideration for debris staging sites and would include:

- LCID landfills located outside Aberdeen and Carthage
- waste management companies operating in the County
- borrow pits in the County





Through the efforts of the County, a Debris Management Plan has been established and will be updated and modified as required to provide debris removal, collection, volume reduction, and disposal in a cost-effective, expeditious, and environmentally-sound manner following a disaster.



8.0 SOLID WASTE COSTS AND FINANCING METHODS

8.1 DESCRIPTION AND ASSESSMENT OF COSTS

Moore County operates seven collection centers for waste and recyclables throughout the County. With the exception of Foxfire, the municipalities manage their own solid waste programs or contract out their programs with various solid waste management companies. The solid waste costs shown in this section are separated by the County's operated program and individual municipalities contracted programs.

Below is a description and assessment of cost associated with the solid waste programs of the County and municipalities.

8.1.1 Moore County Description and Assessment

The total budget for the County's solid waste program during FY 2010-11 was \$1,887,313. The annual cost of the County's collection program was \$1,509,699. This includes the collection centers and collection from government-operated facilities. Waste reduction program costs, including recycling, reuse, mulching, etc., totaled \$660,559. Moore County, excluding contracted municipalities, managed 12,833 tons of waste, 1,804 tons of recyclable materials, and 12,520 tons of yard debris in FY 2010-11. A summary of the County-operated solid waste program costs is shown in Table 8-1. These costs were taken from the Solid Waste Management Annual Report County/Municipality Form for FY 2010-11.

	Collection	Disposal	Waste Reduction	Mulching, Composting, Other Programs	Total
Program Cost	\$986,181	Not Reported	\$283,097	\$377,462	\$1,887,313
Cost per Household	\$51.49	Not Reported	\$14.78	\$25.08	\$98.53
Cost per Ton	\$76.84	Not Reported	\$156.92	\$30.15	\$69.50
<i>Source of data: Solid Waste Management Annual Report County/Municipality form for FY 2010-11.</i>					

With the current program, the cost for waste reduction within the County is significantly less than the cost of collection. The waste centers established by the County for solid waste collection allow for the efficient collection of recyclable materials. However, market impacts or the addition of other recyclables, such as plastics, will increase the waste reduction cost.

8.1.2 Town of Aberdeen Description and Assessment

The Town of Aberdeen offered curbside collection twice a week to 2,515 households during FY 2010-11, during which it disposed of 1,836 tons of waste, 530.37 tons of recyclables, and 1,557 tons of yard waste.





Aberdeen charges a yearly fee for collection and disposal of \$96.00 per household. The costs associated with Aberdeen’s solid waste management program are summarized in Table 8-2.

**Table 8-2
Aberdeen Solid Waste Program Costs, FY 2010-11**

	Collection	Disposal	Waste Reduction	Mulching, Composting, Other Programs	Total
Program Cost	\$183,164	\$78,554	\$52,910	\$155,357	\$391,432
Cost per Household	\$72.82	\$31.23	\$21.03	\$61.77	\$155.64
Cost per Ton	\$99.76	\$42.78	\$99.83	\$99.78	\$99.78

Source of data: Solid Waste Management Annual Report County/Municipality form for FY 2010-11

The cost of waste disposal for the Town of Aberdeen is less than the cost of collection. This is generally related to the current programs in-place, and it is anticipated that the waste collection cost would decrease if modifications to the current programs were implemented.

8.1.3 Town of Cameron Description and Assessment

The Town of Cameron offers curbside collection a week. During FY 2010-11, Cameron collected 70 tons of waste and 11 tons of yard waste from 155 households. Recyclable materials were disposed at the County collection centers and, therefore, not expressed here. Cameron charges a monthly fee for collection and disposal of \$6.60 per household and \$8.50 per business. A summary of the cost associated with Cameron’s solid waste program is shown in Table 8-3.

**Table 8-3
Cameron Solid Waste Program Costs, FY 2010-11**

	Collection	Disposal	Waste Reduction	Mulching, Composting, Other Programs	Total
Program Cost	\$21,227.00	\$9,814.00	---	Not Reported	\$31,041.00
Cost per Household	\$136.95	\$63.32	---	Not Reported	\$200.27
Cost per Ton	\$303.24	\$140.20	---	Not Reported	\$443.44

Source of data: Solid Waste Management Annual Report County/Municipality form for FY 2010-11.

The cost for collection is significantly higher than disposal on a per ton basis due to the low annual tonnages generated by the Town.

8.1.4 Town of Carthage Description and Assessment

In FY 2010-11, the Town of Carthage contracted with Republic Services to provide curbside collection once a week from 2400 households. Carthage charges a fee of \$10.00 per month per household or small





business. The tonnages and total costs associated with Carthage’s solid waste program are not available for 2010-11

8.1.5 Foxfire Village Description and Assessment

Foxfire Village does not provide municipal solid waste collection, recycling, or disposal services. Residents of Foxfire Village either contract for private waste management services or participate in the Moore County program.

8.1.6 Town of Pinebluff Description and Assessment

During FY 2010-11, the Town of Pinebluff contracted with Allied Waste for once-a-week curbside collection to 528 households. The Town handled 286.28 tons of waste, 120.08 tons of recyclables, and 549.44 tons of yard waste. Due to an abundance of pine straw, the demand for yard mulch is minimal; therefore, all yard waste is taken to the County’s facility. Pinebluff has a garbage fee of \$12.00 per month per household and a recycling fee of \$1.00 per month per household. A summary of the associated costs for Pinebluff’s program is shown in Table 8-6.

Table 8-6 Pinebluff Solid Waste Program Costs, FY 2010-11					
	Collection	Disposal	Waste Reduction	Mulching, Composting, Other Programs	Total
Program Cost	\$47,861.36	\$11,989.41	\$20,512.00	Not Reported	\$59,850.77
Cost per Household	\$90.64	\$22.71	\$38.85	Not Reported	\$152.20
Cost per Ton	\$167.18	\$41.88	\$170.82	Not Reported	\$197.76
<i>Source of data: Solid Waste Management Annual Report County/Municipality form for FY 2010-11</i>					

8.1.7 Village of Pinehurst Description and Assessment

The Village of Pinehurst offers curbside collection twice a week to 7,746 households during the FY 2010-11. The Village of Pinehurst handled of 4,124 tons of waste, 1,733 tons of recyclable materials, and 1,147 tons of yard waste during FY 2010-2011. A summary of Pinehurst’s waste management program is summarized in Table 8-7.





**Table 8-7
Pinehurst Solid Waste Program Costs, FY 2010-11**

	Collection	Disposal	Waste Reduction	Mulching, Composting, Other Programs	Total
Program Cost	\$408,580	\$160,964	\$1,042,527	\$211,989	\$1,824,060
Cost per Household	\$52.75	\$20.78	\$134.59	\$27.37	\$235.49
Cost per Ton	\$99.07	\$39.03	\$601.57	\$184.82	\$924.49

Source of data: Solid Waste Management Annual Report County/Municipality form for FY 2010-11.

A suspected typographical error in the 2010-2011 Solid Waste and Materials Management Annual Report for the Village has resulted in anomalously high program costs.

8.1.8 Town of Robbins Description and Assessment

Program information for the Town of Robbins for FY 2010-11 was not available as of the date this report was prepared.

8.1.9 Town of Southern Pines Description and Assessment

The Town of Southern Pines has a contract with Waste Management, Inc. for backyard waste collection once per week. Waste Management, Inc. serviced 6,601 households and disposed 4,308 tons of waste in FY 2010-2011. In addition, 1008 tons of recyclables and 3470 tons of yard waste were collected from 6,417 and 5,004 households, respectively. The Town has a garbage fee of \$3.23 per month and a recycling fee of \$3.86 for household and small business customers. A summary of Southern Pines' solid waste program during FY 2010-2011 is given in Table 8-9.

**Table 8-9
Southern Pines Solid Waste Program Costs, FY 2010-11**

	Collection	Disposal	Waste Reduction	Mulching, Composting, Other Programs	Total
Program Cost	\$715,541	\$180,212	\$250,265	\$447,958	\$1,593,976
Cost per Household	\$108.40	\$27.30	\$39.00	\$89.52	\$264.22
Cost per Ton	\$166.10	\$41.83	\$248.28	\$129.09	\$585.30

Source of data: Solid Waste Management Annual Report County/Municipality form for FY 2010-2011.

8.1.10 Town of Taylortown Description and Assessment

The Town of Taylortown rents one 40-cubic yard roll-off container from Republic so their 354 households can drop off their waste. Citizens disposed of approximately 441.64 tons of waste during FY 20010-11.





The Town charges a garbage fee of \$60.00 per year per household. A summary of Taylortown’s solid waste program costs during FY 2010-11 is given in Table 8-10.

**Table 8-10
Taylortown Solid Waste Program Costs, FY 2010-11**

	Collection	Disposal	Waste Reduction	Mulching, Composting, Other Programs	Total
Program Cost	\$37,492.61	\$21,751.07	---	---	\$59,243.68
Cost per Household	\$105.91	\$61.44	---	---	\$167.35
Cost per Ton	\$84.89	\$49.25	---	---	\$134.14

Source of data: Solid Waste Management Annual Report County/Municipality form for FY 2010-11.

Since the Town of Taylortown provides only a limited MSW collection/disposal program, a comparison or assessment of the program has not been completed.

8.1.11 Town of Vass Description and Assessment

During FY 2010-11, the Town of Vass contracted with Waste Management, Inc. to provide curbside collection once a week. Waste was collected from 357 households. In this fiscal year, the Town disposed of 338 tons of waste and 30 tons of yard waste. The Town charges a yearly fee of \$156.00 per household. The costs associated with Vass’ solid waste program are summarized in Table 8-11.

**Table 8-11
Vass Solid Waste Program Costs, FY 2010-11**

	Collection	Disposal	Waste Reduction	Mulching, Composting, Other Programs	Total
Program Cost	\$55,927.00	---	---	\$5,869.00	\$61,796.00
Cost per Household	\$157.00	---	---	\$16.00	\$173.00
Cost per Ton	\$165.00	---	---	\$196.00	\$361.00

Source of data: Solid Waste Management Annual Report County/Municipality form for FY 2010-2011.

The Town of Vass discontinued waste reduction efforts due to subsequent increases in program costs.

8.1.12 Village of Whispering Pines Description and Assessment

The Village of Whispering Pines currently contracts with Roberson Unique Sanitation to provide backyard collection once a week. During FY 2010 - 2011, waste was collected from 1,307 households with approximately 730 tons of waste. Approximately 353 tons of recyclables were recovered and approximately 438 tons of yard waste were collected. The costs associated with Whispering Pines’ solid waste program are summarized in Table 8-12.





Table 8-12
Whispering Pine Solid Waste Program Costs, FY 2010-11

	Collection	Disposal	Waste Reduction	Mulching, Composting, Other Programs	Total
Program Cost	\$154,108	\$31,495	\$72,521	\$45,294	\$303,418
Cost per Household	\$117.91	\$24.10	\$55.49	\$34.65	232.15
Cost per Ton	\$211.11	\$43.14	\$205.44	\$103.41	\$563.10

Source of data: Solid Waste Management Annual Report County/Municipality form for FY 2010-11.

The Village has instituted a recycling program since the previous Solid Waste Management Plan, which has reduced the tonnage of MSW landfilled and the cost per ton of materials landfilled.

8.2 DESCRIPTION OF FINANCING METHODS

The current County solid waste program is funded through property taxes, tipping fees, and the sale of recyclables. The tire tax and white goods refund completely covered the expenses of the handling and disposal of those special wastes. Aberdeen, Cameron, Pinebluff, Robbins, Southern Pines, Taylortown, and Vass have household charges to help cover the costs of their solid waste programs. Costs not covered by the household fees are covered through property taxes or tipping fees. A summary of the various financing methods used in the County is shown in Table 8-13.

Table 8-13
SOLID WASTE FINANCING METHODS USED BY THE PLANNING AREA
FY 2010-11

	Total SWM Budget	Tipping Fee	Property Taxes / General Fund	Household Charge	Sale of Recyclables	Tire & White Good Tax	Other
Moore County	\$1,887,313	X	X		X	X	
Aberdeen	\$391,431	X		X			
Cameron	\$31,041		X	X			X
Carthage	Not available			X			X
Foxfire	Not available						
Pinebluff	\$80,362		X	X	X		
Pinehurst	\$1,824,062		X				X
Robbins	Not available		X	X			
Southern Pines	\$1,593,978	X	X	X			
Taylortown	\$59,243		X	X			
Vass	\$62,259		X	X			X
Whispering Pines	\$303,418		X		X		X

Source: County and Municipal Solid Waste Management Annual Reports



Funding is available for the financing of current solid waste management programs in the County, and proposed activities should not substantially impact the current funding requirements.



9.0 RESOLUTIONS

The signed copies of resolutions from participating entities showing adoption of this Plan Update are included in Appendix (F)



10.0 ORDINANCES

A copy of the Moore County ordinance addressing solid waste handling and disposal is included in Appendix (G).



11.0 FACILITIES AND RESOURCES AVAILABLE THROUGH PRIVATE ENTERPRISE

The Moore County planning area has successfully integrated the use of private and public facilities in the implementation of the current solid waste management program and will continue this endeavor throughout the next ten years. The majority of MSW generated within the planning area is disposed in privately-owned and operated facilities. In addition, a large portion of waste collection and recycling programs is provided by private companies through contracts with municipalities. The Moore County planning area is a good example of public and private enterprises working together to provide the most economically viable and environmentally-safe management of solid waste.

Appendix A

Waste Reduction Goal Sheet

WASTE REDUCTION GOAL SHEET
NC LOCAL GOVERNMENT TEN YEAR SOLID WASTE MANAGEMENT PLAN

Local Government Name: Moore County

Previously established waste reduction goal: 10% %

After considering your government's current and projected solid waste activities, resources, population, and economic growth have you reached your previously established goal? Yes No

Establish a new waste reduction goal: 10% %

WASTE REDUCTION CALCULATION

To provide 10 years of solid waste management planning, as per G.S. 130A-309.09A(b), waste reduction goals need to be updated. Use the following chart to determine the tonnage needed to be diverted from landfills in order to reach the new waste reduction goal.

CALCULATION	FY 2021-2022
1. Baseline year per capita disposal rate <i>(FY 1991-1992 unless alternate approved by Section)</i>	1.23
2. Percent waste reduction goal	10 %
3. Targeted per capita disposal rate <i>(Subtract line 2 from 1.0 and multiply result by line 1)</i>	1.11
4. Estimated population in the new waste reduction goal year <i>(Available at Office of State Budget and Management website: Projected Annual County Population Totals 2010-2019)</i>	103,987
5. Projected tonnage for disposal at baseline disposal rate <i>(Multiply line 1 by line 4)</i>	121,357
6. Targeted annual tonnage for disposal <i>(Multiply line 3 by line 4)</i>	109,517
7. Targeted annual tonnage to reduce <i>(Subtract line 6 from line 5)</i>	11,840

Population Link: http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/cpa2010p.html

WASTE REDUCTION PLAN

Given the targeted annual tonnage amount to be reduced, explain how you plan to reach the goal:

11,840 tons by increasing recycling

Appendix B

Copy of Notice for Public Meeting

AFFIDAVIT OF PUBLICATION

NORTH CAROLINA

MOORE COUNTY

DAVID WORONOFF, PUBLISHER of THE PILOT, a tri-weekly newspaper published in Moore County and the State of North Carolina, being duly sworn, deposes and says: that the attached advertisement:

Public Meeting

was published in the aforesaid newspaper for 1 consecutive issues/weeks beginning with the issue dated the 18 day of May, 2012 and ending with the issue of May 18, 2012.

David Woronoff

Sworn to and subscribed before me, this 18 day of May, 2012.

LEGAL NOTICE
Moore County
Solid Waste Department
Public hearing Notice

The Moore County Solid Waste Department will hold a public meeting on Tuesday June 19, 2012, at 7:00 pm in Room #1 of the Moore County Agricultural Center located at 707 Pinehurst Avenue, Carthage, North Carolina, to hear the following:

The 2012 THREE YEAR update of the Moore County Solid Waste Management Plan as required by NCGS §130A-309.09A

Citizens will have an opportunity to speak regarding the above.

Copies of the updated Solid Waste Management Plan are on file and available for public review at the Moore County Solid Waste Division office (located at 5227 Hwy 15-501) after June 5, 2012.

Chad Beane
Moore County Solid Waste Division Manager

00250849 5:18c

Michelle Bungartz
Michelle Bungartz

My Commission Expires 6/1/14

*County of Moore
Public Works*
www.moorecountync.gov



P. O. Box 1927
Carthage, North Carolina

(910)947-6315 (Telephone)
(910)947-1992 (Facsimile)

Minutes
Public Meeting – Moore County
Solid Waste Management Plan Update

June 19, 2012 - 7:00 pm

A Public Meeting was held on June 19, 2012 in the Moore County Agricultural Building, Carthage, NC. The purpose of the meeting was to discuss the draft of the three year update to the county wide solid waste management plan.

Chad Beane, Solid Waste Division Manager, along with Charles Hiner with Golder Associates, were the only two who attended the meeting. Draft copies were available for review and discussion for all that may have been interested.

The meeting had been duly advertised in The Pilot newspaper. (see attached advertisement)

Respectfully submitted,

Chad C. Beane

Property Management
Ph - (910)947-2301
Fax - (910)947-2304

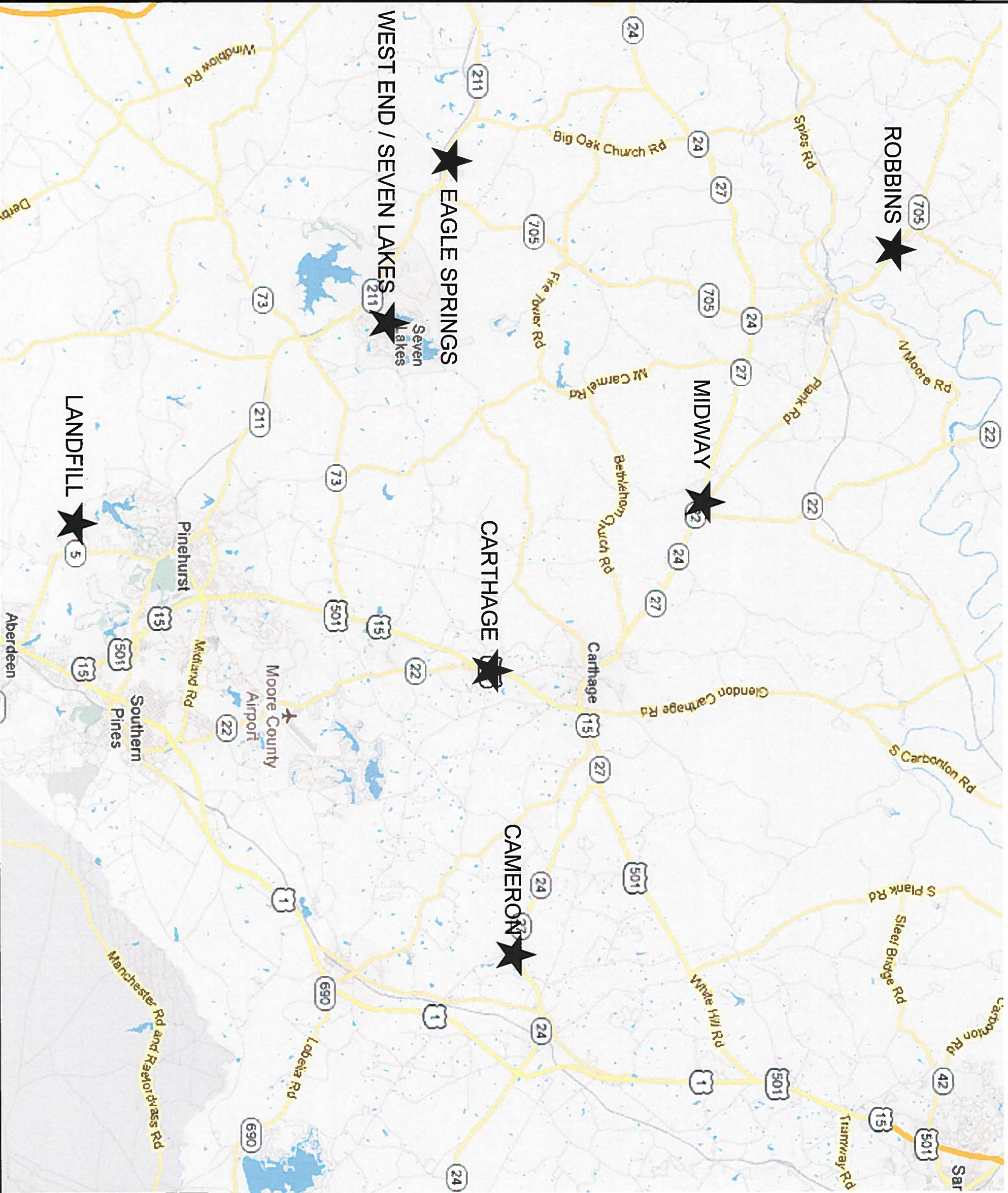
Public Utilities
Ph - (910)947-6315
Fax - (910)947-1992

Solid Waste
Ph - (910)947-3637
Fax - (910)947-1992

Wastewater Treatment Plant
Ph - (910)281-3146
Fax - (910)281-2047

Appendix C

Map of Facilities and Disposal Sites



LEGEND

★ APPROXIMATE LOCATION OF CONVENIENCE CENTERS AND DISPOSAL SITES

REV	DATE	DES	REVISION DESCRIPTION	CAAD	CHK	RW

PROJECT: MOORE COUNTY
SOLID WASTE MANAGEMENT
PLAN UPDATE

TITLE: PUBLIC CONVENIENCE CENTERS AND DISPOSAL SITES

Golder Associates
GREENSBORO, NC

PROJECT No.	FILE No.	SCALE	AS SHOWN	REV.
DESIGN	-	-	-	-
CAAD	-	-	-	-
CHECK	-	-	-	-
REVIEW	-	-	-	-

DWG. 1

Appendix D

Electronic Recycler Certification

Certificate US10/65601



The management system of

Creative Recycling Systems of North Carolina LLC

619 Distribution Drive
Morrisville, North Carolina, 27560, U.S.A.

has been certified by a certification body that is in conformance with ISO/IEC 17021 requirements and applicable ANAB requirements. This organization is found to be in conformance with all requirements of:



Responsible Recycling©:2008

The scope of registration is as follows:

Electronics Recycling – The diversion of end-of-life / surplus devices from the waste stream by the re-use and / or recycling of such electronic devices.

Further clarifications regarding the scope of this certificate and the applicability of Responsible Recycling©:2008 requirements may be obtained by consulting the organization

This certificate is valid from 18 February 2010 until 17 February 2013 and remains valid subject to satisfactory surveillance audits. Recertification audit due a minimum of 30 days before the expiration date.
Issue 1.

Authorized by

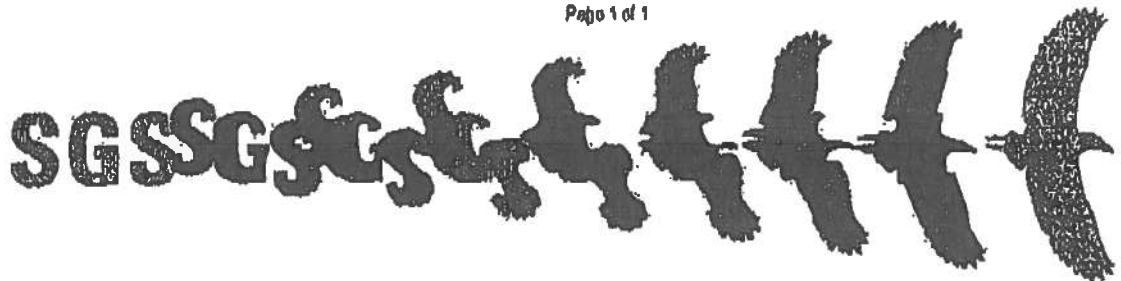
Zsuzsanna C. Pivonik
Accreditation Manager, North America

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This certificate remains the property of SGS and shall be returned upon request.

Page 1 of 1



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Appendix E

Emergency/Disaster Debris Management Plan

Emergency Operations Plan

Moore County Public Works
Solid Waste Division

I. Purpose: This plan predetermines actions to be taken by the Moore County Public Works / Solid Waste Division to reduce the vulnerabilities of property to disaster and establish capabilities to respond effectively to the actual occurrence of a disaster.

II. Situation and Assumptions: Moore County is exposed to many hazards, all of which have the potential to disrupt County business, cause damage, and lead to the accumulation of debris. Potential hazards identified for Moore County include:

Hurricanes/Tornadoes/Windstorms

Flooding/Dam Failures

Winter Storms/Ice Storms

Major Fires

III. Assumptions: Moore County owns and operates several Solid Waste Collection Centers, a Construction & Demolition Landfill, Yard Waste Facility and hosts the MSW Transfer Station. Following the disaster, Public Works is responsible for debris management at the Landfill, repairs and restoration of all County facilities and other duties as listed herein.

IV. Responsibilities:

Solid Waste Division Manager:

Plan for emergency repair and restoration of Solid Waste facilities

Develop and direct debris removal plans, identify sites to receive storm debris, and coordinate operations thru close communication with Public Works Director.

Contact State Division of Solid Waste Management to determine any special conditions or waivers that may apply.

Issue instructions concerning procedures for debris removal and Landfill operations.

Provide timely briefings to all supervisors.

Landfill Supervisor:

Make sure landfill staff report to Landfill to begin restoration and operations as soon as possible.

Sharpen, service and fuel up chain saw prior to event.

Top off all vehicles/equipment with fuel.

Cover trash at Landfill.

Maintain sufficient inventory of ice melt and de-icer for scales.
(Tarp scales before ice or snow event)

Keep scales clear and ice free.

Clear off areas to receive storm debris.

Check fuel inventory before event if possible. Top off if necessary.

Grade Landfill roads to allow delivery of waste.

Load motor grader in preparation for transport if needed for other County emergencies.

Be available to assist with other departmental functions during and after emergencies.

Collections / Trucking Supervisor:

Truck drivers report immediately to shop and assist with restoration duties &/or be prepared to haul debris.

Pull all open containers with loose trash prior to event.

Deliver supplies prior to and after event.

Secure all magazine containers, signs and bring all loose items in the buildings at the collection centers.

Deliver and maintain ice melt and de-icer at all collection sites.

Be available to assist with other departmental functions during and after emergencies.

List of Appendixes:

Appendix A - Personnel Roster

Appendix B - Equipment Inventory

Appendix C - Vendor information

Appendix A:

Public Works Department Telephone List

Solid Waste Division - Office Numbers

Solid Waste Division	910-947-3637	Truck Driver Cell Phone 910-639-9403	
Public Utilities Division	910-947-6315	Maintenance & Garage "On-Call"	
FAX # Public Works	910-947-1992	910-639-3752	
Landfill Scales House	910-295-4202	Landfill Shop	295-0431
Uwharrie Environmental, Inc. Troy, NC.	1-800-676-9696	Transfer Station @ Landfill	295-1691

Employee Name (Full Time)	Home Number	Job Title	Personal Cell Phone #'s
Randy Gould		Director - Public Works	910-638-9287
Chad Beane	910-235-4500	Solid Waste Division Manager	910-986-4376
Jimmy Brown	910-464-3919	Collection Supervisor	910-639-9403
R. Wayne Hussey	910-464-5239	Truck Driver	910-638-1836
Worth Comer	910-464-3875	Truck Driver	910-690-7654
Baxter L. Vest, Jr. (Junior)	910-947-5280	Landfill Supervisor	910-992-6932
C. Marshall Hicks	910-692-1873	L.F. Equip./Truck Driver	910-690-6565
Charlie Marks	910-690-6797	Landfill Equip.Opr.	
Douglas Edwards (Resource)	910-947-6975	Landfill Equip.Opr.	
W. Wayne Lowe	910-947-3470	Weighmaster-L.F. Scales	
David Kidd	910-464-3832	Weighmaster-L.F. Scales	910-638-4967
Mike Lane (Resource)	910-245-3578	Weighmaster-L.F. Scales	910-639-4967

Appendix B

Vehicle/Equipment List:

- 5 Roll Off Trucks
- 1 Mack tractor/truck
- 1 Ford F-150 fuel truck (not road worthy)
- 1 Ford F-150 truck
- 1 Ford F-250 truck 4x4
- 1 Ford Ranger truck 4x4

- 1 Case Rubber Tire Loader
- 1 Champion Motor Grader
- 1 Ford Backhoe Tractor 555 D
- 1 Cat Track Loader 953 B
- 1 John Deere Rubber Tire Loader
- 1 John Deere Tractor 5400

- 2 Van type (enclosed trailers) 45' long
- 1 Van type (enclosed trailer) 40' long
- 1 Low Boy trailer 40' long

- 1 Chain saw 20" inch cut

Appendix C:

Simmons & Simmons Grinding Services
Leaf / Limb / Yard waste grinding
1-910-596-7586

Carolina Landscape Services
Leaf / Limb / Yard waste grinding and Hauling
1-843-672-7300

Don Thomas Trucking
Heavy Equipment
910-673-6651

Republic Services
Trucking and Hauling
910-572-2556

COUNTY OF MOORE
DEBRIS MANAGEMENT PLAN

August 2001
Updated 06/2006
Updated 06/2009

COUNTY OF MOORE
DEBRIS MANAGEMENT PLAN

MISSION

To facilitate and coordinate the removal, collection, and disposal of debris following a disaster to mitigate against any potential treat to health, safety, and welfare of the impacted citizens, expedite recovery efforts in the impacted area, and address any threat of significant damage to public property.

ORGANIZATION

The Moore County Department of Public Works is responsible for the debris removal function as it pertains to County property and facilities. Moore County Public Works is also tasked with the responsibility to provide debris disposal options to municipalities and county citizens. Public Works will work in conjunction with designated support agencies, utility companies, waste management firms, and trucking companies to facilitate the debris clearance, collection, reduction, and disposal needs following a disaster in the County of Moore.

Because of the limited quantity of resources and service commitments following the disaster, Moore County will often rely heavily on private contractors to assist in the removal, collection, and management of debris for reuse, resource recovery, reduction, and disposal. This is particularly true whenever the disaster is substantial. In this case, the entire process (i.e., clearance, collection, transportation, reduction, and disposal) or segments of the process may be contracted out.

<u>Organizations Involved</u>	<u>Contact</u>	<u>Phone</u>
Moore County Public Works	Dennis Brobst, Director	910-947-3637
Moore County Landfill	Junior Vest, Supervisor	910-295-0431
Moore County Scale House	Wayne Lowe, Weighmaster	910-295-4202
Moore County Finance/Purchasing	Lisa Hughes, Director	910-947-6310
Moore County Fleet Maintenance	Barry Oldham, Supervisor	910-947-2301
Moore County Sheriff's Dept.	Lane Carter, Sheriff	910-947-2931
Moore County Planning/Zoning and Inspections	Joey Raczkowski, Director	910-947-5010
N.C. Dept. of Transportation	Sarah Foster	910-947-2233
Uwharrie Environmental, Inc.	Joe Reynolds, General Manager	800-676-9696
N.C. Dept. of Solid Waste	Robert Hearn	919-508-8400
Moore County Emergency Mgmt. Waste Management, Inc.	Carlton Cole, Public Safety Director	910-947-6317
	Michelle Hunt	910-281-4727
Allied Waste	Billy Maness	910-576-3851

<u>Organizations Involved</u>	<u>Contact</u>	<u>Phone</u>
Jerry Chesney, Logger	Jerry Chesney	919-499-9285
Simmons & Simmons, Inc.	David Simmons	910-596-7586
Don Thomas Trucking Co.	Don Thomas, Owner	910-673-6651
Johnny Harris Trucking Co.	Johnny Harris, Owner	910-947-2112
N.C. Division of Emergency Mgmt.	Woody Mashburn	919-575-4122
N.C. Division of Solid Waste Hazardous Waste Section	Flint Worrill	910-486-1541
Charles Blythe Equipment Co.	Charles Blythe, Owner	800-635-0907
Carolina Power & Light Co.		800-452-2777

CONCEPT OF OPERATIONS

Moore County Public Works will be responsible for removing debris from property under its own authority. Public Works will stage equipment in strategic locations locally, if necessary, to protect the equipment from damage, preserve the decision maker's flexibility for deployment of the equipment, and allow for the clearing crews to begin work immediately after the storm. Moore County Public Works will also provide disposal options to municipalities and citizens of the County.

Public Works will develop and maintain a list of approved contractors who have the capability to provide debris removal, collection, volume reduction, and disposal in a cost effective, expeditious, and environmentally sound manner following a disaster.

The listing will categorize contractors by their capabilities to facilitate their identification by State agencies and local governments, as well as ensure their effective utilization and prompt deployment following the disaster. All operations will be coordinated from the Public Works Office.

CONTRACTS AND COOPERATIVE AGREEMENTS

Sample contractors with a menu of services and generic scopes of work will be developed prior the disaster to allow Moore County to more closely tailor its contracts to its needs, as well as expedite their implementations in a prompt and effective manner.

Moore County has entered into mutual aid agreements with other counties and municipalities.

SITE SELECTION

Debris storage and reduction sites will normally be at the Moore County Landfill.

Additional storage and reduction sites will be identified and evaluated by interagency selection teams comprised of a multi-disciplinary staff who are familiar with the area. A listing of the appropriate Local, State and Federal contacts will be developed by the appropriate agencies to expedite the formation of the selection teams. Temporary collection and processing sites will be on public property when feasible to facilitate the implementation of the mission and mitigate against any potential liability requirements. Activation and use of sites will be under the control of the Public Works Director, and will be coordinated with other recovery efforts through the Emergency Operations Center.

Site selection criteria will be developed into a checklist format for use by these teams to facilitate identification and assessment of potential sites. Criteria will include such factors as ownership of property, size of parcel, surrounding land uses and environmental conditions, and transportation facilities that serve the site. Guidelines as provided by N.C. DENR are included within the Appendix and will be utilized as needed.

RESPONSIBILITIES:

Debris Manager: Director of Public Works

- Work with and coordinate all necessary personnel and agencies to ensure safe, effective and timely debris management.
- Identify debris types and classifications.
- Determine capabilities to reduce, reuse, reclaim, recycle, incinerate and dispose of disaster debris.
- Develop debris removal priorities on public properties.
- Develop temporary and permanent debris collection site criteria.
- Identify potential and permanent debris collection, storage, recycle and relocation sites.
- Coordinate with Landfill personnel and Uwharrie Environmental about extended hours of operation, etc.

Public Works Department

- Emergency debris clearance on public property
- Identify and prepare temporary & permanent storage sites for debris.
- Debris removal to storage sites
- Contractor supervision/monitoring

Moore County Emergency Services Director

- Identify and obtain supplemental resources to assist in debris management.
- Work with Local government officials and N.C. DOT to prioritize emergency clean-up efforts.

Uwharrie Environmental, Inc.

- Normal transfer station activities
- Possible extended hours

DEBRIS MANAGEMENT ACTIONS

Normal Operations

- Develop local regional resource list of contractors who can assist county and municipalities in all phases of debris management.
- Develop sample contracts with generic scopes of work to expedite the implementation of their debris management strategies.
- Develop mutual aid agreements with other State agencies and local governments.
- Identify and pre-designate potential debris storage sites for the type and quantity of debris anticipated following a catastrophic event.
- Pre-identify local and regional critical routes in cooperation with contiguous and regional jurisdictions.
- Develop site selection criteria checklists to assist in identifying potential debris storage sites.
- Identify and coordinate with appropriate regulatory agencies regarding potential regulatory issues and emergency response needs.
- Develop the necessary right of entry and hold harmless agreements identifying all levels of government against any potential claims.
- Develop and coordinate pre-scripted announcements with the Public Information Officer (PIO) regarding debris removal process, collection times, temporary storage sites, use of private contractors, environmental and health issues, etc.

Increased Readiness

(A natural or man-made disaster is threatening the local area)

- Review and update plans, standard operating procedures, generic contracts, and checklists relating to debris removal, storage, reduction, and disposal process.
- Alert local departments that have debris removal responsibilities ensuring that personnel, facilities, and equipment are ready and available for emergency use.
- Relocate personnel and resources out of harm's way and stage in areas where they can be effectively mobilized.
- Review potential local, regional, and debris staging and reduction sites that may be used in the response and recovery phases in the context of the impending threat.
- Review resource listing of private contractors who may assist in debris removal process. Make necessary arrangements to ensure their availability in the event of the disaster.

Response

- Activate debris management plan, coordinate with needs assessment team.
- Begin documenting costs.
- Coordinate and track resources (public and private).
- Establish priorities regarding allocation and use of available resources.
- Identify and establish debris temporary storage and disposal sites (local, regional).

- Address any legal, environmental, and health issues relating to the debris removal process.
- Continue to keep public informed through the PIO.

Recovery

- Continue to collect, store, reduce, and dispose of debris generated from the event in a cost-effective and environmentally responsible manner.
- Continue to document costs.
- Upon completion of debris removal mission, close out debris storage and reduction sites by developing and implementing the necessary site restoration actions.
- Perform necessary audits of operation and submit claim for Federal assistance

DEBRIS REMOVAL PRIORITIES

The debris removal process will be initiated promptly and conducted in an orderly, effective manner in order to protect public health and safety following a major or catastrophic event. To achieve this objective, the first priority will be to clear debris from key roads in order to provide access for emergency vehicles and resources into the impacted area. The need and demand for critical services will be increased significantly following a disaster. Therefore, the second priority that debris removal resources will be assigned is providing access to critical facilities. The third priority for debris removal efforts will be the elimination of debris related threats to public health and safety. Moore County Emergency Services Director will coordinate these efforts with N.C. DOT, National Guard forces, county personnel and municipal officials.

DEBRIS REMOVAL OPERATIONS EMERGENCY ROADWAY DEBRIS REMOVAL

Clearing Emergency Access Routes

- Key access routes are cleared to allow for:
 - Movement of emergency vehicles.
 - Law enforcement.
 - Resumption of critical services.
 - Damage assessment of public facilities and utilities
- Debris may include:
 - Tree blow-down and broken limbs.
 - Yard trash such as outdoor furniture and trashcans.
 - Utility poles; power, telephone, and cable television lines; transformers and other electrical devices.
 - Building debris such as roofs, sheds, block walls, chimneys.
 - Personal property such as clothing and appliances.

- Roadway debris is moved to the side of the road to open access routes into devastated areas.
- No attempt is made to remove or dispose of the debris.

First Priority

- Provided to:
 - Police
 - Fire/Rescue stations
 - Emergency Operations Center

Second Priority

- Open access to other critical community facilities:
 - Schools and other shelter locations
 - County Buildings
 - Water treatment plants
 - Power generation units

Third Priority

- Clear other main roads and all streets with the county.

PUBLIC INFORMATION MANAGEMENT

It shall be the responsibility of the Public Works Director and Emergency Services Director to coordinate with other public information agencies and to prepare:

- Information bulletins
- Radio announcements
- Newspaper notices

Public Notification

The Public will also be informed of debris removal activities, such as:

- Disposal methods and ongoing actions to comply with State and Environmental Protection Agency (EPA) regulations
- Disposal procedures for self-help and independent contractors.
- Restrictions and penalties for creating illegal dumps.
- FEMA regulations regarding eligibility for debris removal

Dumpsites

All storm, generated debris will be disposed of at the Moore County Landfill located on Hwy #5 in Aberdeen, NC or other designated permitted sites. Temporary staging sties will be established and utilized as necessary.

Appendix F

Resolutions to Adopt the Solid Waste Management Plan Update

Appendix G

Moore County Solid Waste Ordinance

low-level radioactive waste board recommends that the permit be revoked, it shall so report to the board of commissioners in writing. Within ten days of the receipt of the recommendation, the county commissioners shall hold a public hearing after which they shall continue or revoke the permit. The board of commissioners may continue the permit upon finding that the facility operator has made a good faith effort to comply with the permit and to remedy violations, that reinstatement of the permit would not endanger the public health and welfare, and the facility operator has proposed a plan to remedy any other hazardous conditions on the facility site as expeditiously as possible.

(Ord. of 5-3-82, § 14(F))

Secs. 8-132—8-150. Reserved.

ARTICLE IV. SOLID WASTE*

DIVISION 1. GENERALLY

Sec. 8-151. Purpose.

The purpose of this article is to promote the public safety, health and welfare of the citizens of the county in the storage, collection, transportation and disposal of solid waste throughout the county, and in the use of solid waste container sites located throughout the county. These sites contain equipment which could prove injurious to the public and this article is designed to protect the public as well as the property of the county.

(Ord. of 10-5-87(1), Art. III; Ord. of 10-5-87(2), Art. III)

Sec. 8-152. Authority.

Under provisions pursuant to sections 153A-121, 153A-135, 153A-136 and 153A-292 of the general statutes, the county hereby exercises its authority to enact the regulations set out in this article.

(Ord. of 10-5-87(1), Art. IV; Ord. of 10-5-87(2), Art. IV)

Sec. 8-153. Scope.

The regulations set out in this article shall govern the storage, collection, transportation and disposal of solid waste in the county, and the use of solid waste container sites operated and maintained by the county solid waste department.

(Ord. of 10-5-87(1), Art. V; Ord. of 10-5-87(2), Art. V)

***State law references**—Solid waste management, G.S. 130-166.16 et seq.; local government solid waste responsibilities, G.S. 130A-309.09A; county may establish and operate solid waste collection and disposal facilities outside city corporate limits, G.S. 153A-292; location of garbage collection containers on highway rights-of-way, G.S. 136-18.3; authority to levy taxes to provide solid waste collection and disposal services, G.S. 153A-149(c)(312); solid waste management, 15A N.C. Admin. Code 13B.0101 et seq.

Sec. 8-154. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Garbage means all putrescible wastes, including animal and vegetable matter, animal offal and carcasses and recognizable industrial byproducts, but excluding sewage and human wastes.

Health director means the director of the county health department or his authorized representative.

Refuse means all nonputrescible wastes.

Solid waste means garbage, refuse, rubbish, trash and other discarded solid materials, including solid 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 effluents, dissolved materials in irrigation return flows or other common water pollutants.

Solid waste collector means any person who collects or transports solid waste.

Solid waste container site means any site designated, operated and maintained by the county for the purpose of collecting solid waste.

Solid waste director or *director of solid waste* means the director of the county solid waste department or his authorized representative.

Solid waste disposal site means any place at which solid wastes are disposed of by incineration, sanitary landfill or any other authorized methods.

(Ord. of 10-5-87(1), Art. VI; Ord. of 10-5-87(2), Art. VI)

Cross reference—Definitions and rules of construction generally, § 1-2.

Sec. 8-155. Storage.

(a) No owner, occupant, tenant or lessee of any premises shall permit any garbage or other refuse to accumulate upon such premises that is not stored in a manner approved by the health director or the director of solid waste.

(b) Garbage shall be stored in a container of a type approved by the health director or director of solid waste. Every such container shall be constructed of metal, or equally durable material, in such a manner as to be strong, watertight, not easily corrodible, flyproof and rodentproof; shall have handles designed for lifting and shall have fly-tight covers which shall be kept in place at all times except when garbage or other refuse is being deposited in or removed from such container. The health director shall have the authority to approve the use of containers not meeting these specific standards when it can be shown that such containers meet applicable health standards. A sufficient number of containers shall be provided to hold at least one week's accumulation of garbage. Each garbage container shall be kept clean so that no odor or other nuisance will exist.

(c) Refuse shall be stored in such a manner that it will not provide harborage to rats nor cause a fire hazard.

(Ord. of 10-5-87(1), Art. VII)

Sec. 8-156. Collection.

The owner, occupant, tenant or lessee of any premises upon which garbage is stored shall remove, or cause to be removed, all garbage from such premises at least once a week. Solid waste collectors shall remove all solid waste from the premises, when they receive compensation for this service, at least once a week. The work shall be done in a clean and orderly manner, without causing damage to the container. Any solid waste that is spilled shall be cleaned up, and the premises left in a sanitary condition.

(Ord. of 10-5-87(1), Art. VIII)

Sec. 8-157. Transportation.

No solid waste collector shall transport solid waste in a conveyance which has not been approved in accordance with the provisions of this article. Vehicles or containers used for the collection and transportation of garbage or refuse containing garbage, shall be covered, leakproof, durable and of easily cleanable construction. These shall be cleaned as often as necessary to prevent a nuisance or insect breeding, and shall be maintained in good repair. Vehicles or containers used for the collection and transportation of any solid waste shall be loaded and moved in such a manner that the contents will not fall, leak or spill therefrom, and shall be covered in such a manner as to prevent blowing of material. If spillage should occur, the material shall be picked up immediately by the solid waste collector and returned to the vehicle or container and the area properly cleaned.

(Ord. of 10-5-87(1), Art. IX)

Sec. 8-158. Disposal.

No solid waste collector, or other person, shall dispose of solid waste, except by one of the following methods; provided that, this section shall not be construed to prevent any person from properly disposing of solid waste from his own residence on his own property in a safe and sanitary manner approved by the health director or director of solid waste:

- (1) Sanitary landfill which has been approved by the division of health services as meeting all the requirements of the division of health services Rules and Regulations Providing Standards for Solid Waste Disposal.
- (2) Solid waste container sites operated by the county which have been approved by the department of health services as meeting all the requirements of the department of health services.
- (3) Incinerator which meets all requirements of the local, state and federal air pollution standards.
- (4) By any other method including reclaiming or recycling processes which has been approved by the department of health services and the solid waste director.

(Ord. of 10-5-87(1), Art. X)

Sec. 8-159. Reserved.

Editor's note—At the request of the county, § 8-159, which pertained to use of container sites, has been deleted. Said provisions derived from Ord. of Oct. 5, 1987(2), Art. VII, §§ 1—6. See the Code Comparative Table.

Sec. 8-160. Collector permits—Required; exemptions.

No person shall for profit collect, transport or dispose of solid waste without a written permit from the county health department; provided that, this section shall not apply to any person disposing of solid waste from his own residence or business, unless he hires a person to do so. The health director shall issue such permit only when, upon inspection by appropriate personnel including those stated in section 8-162, that the facilities, equipment and proposed operating methods of the applicant are in compliance with the requirements of these regulations.

(Ord. of 10-5-87(1), Art. XI)

Sec. 8-161. Same—Revocation.

(a) Whenever upon the inspection of facilities, equipment or operating methods of any person holding a permit to collect, transport or dispose of solid waste, the health director, solid waste director or other enforcement officer finds that conditions or practices exist which are in violation of the provisions of these regulations, the health director shall give notice in writing to such person that unless such conditions or practices are corrected within ten days, the permit will be revoked. At the end of such ten-day period, the health director shall make a reinspection, and if he finds that such conditions or practices have not been corrected, he shall give notice in writing to such person that his permit has been revoked. Upon the receipt of this notice, such person shall immediately cease to collect, transport or dispose of solid waste. No such permit shall be reinstated by the health director until he finds, upon inspection 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 board of commissioners.

(b) Upon written petition from a person whose permit to collect, transport or dispose of solid waste has been denied or revoked, the board of commissioners shall hold a hearing at which time such person shall be given an opportunity to show that his permit should not have been denied or revoked. No such hearing shall be held unless written petition therefore shall have been filed in the office of the health director on or before the tenth day following the day on which such permit was denied or revoked. The health director shall convey the request for a hearing to the chairman of the board of commissioners as soon as practicable. Such hearing shall be held within 30 days following the receipt of such petition by the chairman. After such hearing, the board of commissioners may either approve the denial or revocation of such permit or order that it be issued or reinstated, depending upon its findings as to whether or not these regulations have been complied with.

(Ord. of 10-5-87(1), Art. XII)

Sec. 8-162. Enforcement.

The rules and regulations prescribed in this article shall be enforced by the appropriate county agencies having duties and responsibilities in the areas of health, solid waste disposal and law enforcement. The agencies with enforcement powers shall include, but not be limited to, the county health department, county solid waste department and the county sheriff's department.

(Ord. of 10-5-87(1), Art. XIII)

Sec. 8-163. Penalties.

Any person who violates the rules and regulations set forth in this article shall be guilty of a misdemeanor and shall be subject to a fine of not more than \$50.00 or imprisonment of not more than 30 days, as specified by section 14-4 of the general statutes.

(Ord. of 10-5-87(1), Art. XIV; Ord. of 10-5-87(2), Art. VIII)

Secs. 8-164—8-170. Reserved.

DIVISION 2. SOLID WASTE CONTAINER REGULATIONS

*Subdivision 1. In General***Sec. 8-171. Title.**

This division shall be known and may be cited as the Solid Waste Container Ordinance of Moore County, North Carolina.

(Ord. of 10-5-89, Art. I)

Sec. 8-172. Preamble.

Whereas, the Moore County Board of Commissioners is authorized by the General Statutes of the State of North Carolina to enact an ordinance regulating solid waste collection, storage and transportation within Moore County, Now, therefore, be it ordained that the following regulations shall apply to Moore County, North Carolina.

(Ord. of 10-5-89, Art. II)

Sec. 8-173. Purpose.

The purpose of this division is to promote the public safety, health and welfare of the citizens of Moore County in the use of solid waste container sites located throughout the county. These sites contain equipment which could prove injurious to the public and this division is designed to protect the public as well as the property of Moore County.

(Ord. of 10-5-89, Art. III)

Sec. 8-174. Authority.

Under provisions pursuant to Chapters 153A-121 and 153A-136 of the North Carolina General Statutes, Moore County hereby exercises its authority to enact these regulations.
(Ord. of 10-5-89, Art. IV)

Sec. 8-175. Jurisdiction.

On and after the date of approval by the board of commissioners, these regulations shall govern the use of solid waste container sites operated and maintained by the Moore County Solid Waste Department.
(Ord. of 10-5-89, Art. V)

Sec. 8-176. Definitions.

The following definitions shall apply in the interpretation and enforcement of these regulations:

Director of solid waste means the director of the Moore County Solid Waste Department or his authorized representative.

Garbage shall mean all putrescible wastes, including animal and vegetable matter, animal offal and carcasses and recognizable industrial by-products, but excluding sewage and human wastes.

Person means any individual, firm, governmental unit, organization, partnership, corporation or company.

Refuse means all non-putrescible wastes.

Solid waste means garbage, refuse, rubbish, trash and other discarded solid materials, including solid 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 effluents, dissolved materials in irrigation return flows or other common water pollutants.

Solid waste collector means any person who collects or transports solid waste.

Solid waste container site any place owned, leased, rented or otherwise operated by the Moore County Solid Waste Department at which refuse, garbage or solid waste is collected, transported or disposed of.

(Ord. of 10-5-89, Art. VI)

Sec. 8-177. Penalties.

Any person who violates the rules and regulations set forth in this division shall be guilty of a misdemeanor and shall be subject to a fine of not more than \$50.00 or imprisonment of not more than 30 days, as specified by G. S. 14-4. Each day a violation occurs is a separate violation.
(Ord. of 10-5-89, Art. VIII)

Secs. 8-178—8-180. Reserved.

*Subdivision II. Use of Container Sites***Sec. 8-181. Residential waste.**

The container sites located throughout Moore County that are owned and operated by the county are for the use of the citizens of the county for the purpose of disposal of residential waste only and for the collection of designated recyclable materials. These sites are to be used only during operating hours.

Contract solid waste carriers and privately hired carriers shall not use the county container system. The contractors will use the landfill for construction and demolition waste and shall use the transfer station for other solid waste unless such waste is transported outside the county. (Ord. of 10-5-89, Art. VII, § 1; Mo. of 1-4-88)

Sec. 8-182. Unacceptable materials.

No person shall place in a solid waste container site:

Fire or embers;

Oil and other liquids;

Poisons;

Chemicals;

Herbicides and pesticides;

Stumps and/or logs;

Tires;

Infectious waste;

Lead acid batteries;

Brush;

Yard waste;

Animals;

Concrete;

Construction material;

Radioactive waste;

Other materials as identified by the State of North Carolina or Moore County's contractor for ultimate disposal.

(Ord. of 10-5-89, Art. VII, § 2; Mo. of 1-4-88)

Sec. 8-183. Fire prevention.

It shall be unlawful for any person to set or cause to be set any fire in a solid waste container. No person shall place in a container embers, ashes or other material which would create a fire hazard. The county offers a \$500.00 reward for the arrest and conviction of anyone found guilty of a burning solid waste container.

(Ord. of 10-5-89, Art. VII, § 3)

Sec. 8-184. Scavenging.

It shall be unlawful for any person to remove any item from a solid waste container. No person shall climb on, around or inside a container. No person shall open or attempt to open any solid waste container. No person shall cause any damage to be inflicted upon a solid waste container.

(Ord. of 10-5-89, Art. VII, § 4)

Sec. 8-185. Loitering.

No person or persons shall loiter and/or congregate on any container site property and no vehicle shall be left unattended on said property. Any vehicle left unattended shall be towed away at the owner's expense.

(Ord. of 10-5-89, Art. VII, § 5)

Sec. 8-186. Littering.

Solid waste shall be placed in and not around a container.

(Ord. of 10-5-89, Art. VII, § 6)

ACCEPTABILITY OF MATERIAL FOR LANDFILL

<i>Acceptable</i>	<i>Conditional Acceptance</i>	<i>Not Acceptable</i>
1. Garbage and rubbish from routine collection services at residences and commercial establishments	1. Dead animals	1. Any liquid or semi-liquid waste or sludge
2. Household appliances, furniture bedding	2. Metal and cardboard drums containing residues of chemicals	2. Any chemicals that may be dangerous to employees or equipment or that may pollute the ground water
3. Brush, tree trimmings, leaves and general refuse from residences	3. Metal filings, cuttings, trimmings	3. Any fire or highly inflammable material
4. Cardboard and wooden containers from business and industry	4. Plastic cuttings and trimmings	4. Demolition and construction waste in large quantities
5. Demolition and construction waste in small quantities	5. Plastic items or wrappers in quantities	5. Waste from major land clearing operations

<i>Acceptable</i>	<i>Conditional Acceptance</i>	<i>Not Acceptable</i>
6. Cardboard drums (empty)	6. Textile waste not boxed or bagged, particularly long thread waste	
7. Textile waste when boxed or baled	7. Metal bands in quantities	
8. Textile cones and tubes	8. Tires	
9. Street refuse and litter	9. Stumps and logs	
	10. Metal drums	
	11. Wire in quantities	
	12. Junk cars or vehicles	

NOTE: DIRECTOR OF SOLID WASTE TO DETERMINE HOW AND WHERE THESE MAY BE ACCEPTED

Secs. 8-187—8-200. Reserved.

ARTICLE V. LAND CLEARING AND INERT DEBRIS LANDFILLS

DIVISION 1. TITLE

Sec. 8-201. Title.

This article shall be known as the Land Clearing and Inert Debris Landfill Ordinance of the County of Moore, North Carolina and may be cited or referred to as the Landfill Ordinance. (Ord. of 5-19-97(1), Art. I, § 1.1; Ord. of 11-17-97(1), Art. I, § 1.1)

Secs. 8-202—8-210. Reserved.

DIVISION 2. GENERAL PROVISIONS, ADMINISTRATION AND ENFORCEMENT

Sec. 8-211. Definition of land clearing and inert debris landfill.

A lot, plot, parcel or area of land upon or in which stumps, trees, limbs, brush, grass and other naturally occurring vegetation material, concrete, brick, concrete block, uncontaminated soil, gravel, rock, untreated wood, unpainted wood only can be placed. (Ord. of 5-19-97(1), Art. II, § 2.1; Ord. of 11-17-97(1), Art. II, § 2.1)

Sec. 8-212. Exemptions.

Notwithstanding any other provisions of this article the placing of any land clearing or inert debris materials on a lot, plot or parcel that was generated on or came from the property on which it was placed, by the owner of the property is exempt from the provision of this article. (Ord. of 5-19-97(1), Art. II, § 2.2 Ord. of 11-17-97(1), Art. II, § 2.2)

Sec. 8-213. Administration.

The planning and zoning administrator is hereby designated as the administrative official of this article.

(Ord. of 5-19-97(1), Art. II, § 2.3 Ord. of 11-17-97(1), Art. II, § 2.3)

Sec. 8-214. Penalties for violations.

(a) *Misdemeanor.* After the effective date of this article, any person who, being the owner of any land located within the jurisdiction of this article, who thereafter develops or uses or allows the development or use of his or her land in violation of this article shall be guilty of a Class 3 misdemeanor. Moore County, through its attorney or other official designated by the Moore County Board of Commissioners, may enjoin illegal development or use of property as a land clearing and inert debris landfill by action for injunction. Further, violators of this article shall be subject, upon convictions, to fine and/or imprisonment as provided by G.S. 14.4.

(b) *Continuing violation.* Each day's continuing violation of this article shall be separate and distinct offense.

(c) *Civil penalty.* The violation of any provision of this article shall subject the offender to a civil penalty in the amount of \$100.00 per day to be recovered by the county. Violators shall be issued a written citation which must be paid within ten days.

(d) *Equitable remedies.* This article may also be enforced by appropriate equitable remedies issuing from a court of competent jurisdiction.

(e) *Combination of remedies.* Nothing in this section shall be construed to limit the use of remedies available to the county, which may seek to enforce this article by using any one, all, or a combination of remedies.

(Ord. of 5-19-97(1), Art. II, § 2.4 Ord. of 11-17-97(1), Art. II, § 2.4)

Sec. 8-215. Fees.

The property owner or developer or operator shall pay to the county a nonrefundable fee, at the time of submitting an application for a proposed land clearing and inert debris landfill for approval, in the amount of \$100.00 or as the board of commissioners may establish, from time to time, in a schedule of fees.

(Ord. of 5-19-97(1), Art. II, § 2.5 Ord. of 11-17-97(1), Art. II, § 2.5)

Secs. 8-216—8-220. Reserved.**DIVISION 3. LAND CLEARING AND INERT DEBRIS LANDFILLS****Sec. 8-221. Size.**

A land clearing and inert debris landfill may not be less than two acres in size.

(Ord. of 5-19-97(1), Art. III, § 3.1; Ord. of 11-17-97(1), Art. III, § 3.1)

Sec. 8-222. Access.

Access to a land clearing and inert debris landfill must be from a road, street etc., that is a state department of transportation maintained road or a private road, that has a right-of-way width of at least 30 feet and a cleared or driveable area of not less than 20 feet. Any ingress or egress that does not abut one of the above road, entrance, etc. must also have a row width of not less than 30 feet and a cleared and driveable area that is adequately maintained of at all times and that is at least 20 feet in width.

(Ord. of 5-19-97(1), Art. III, § 3.2; Ord. of 11-17-97(1), Art. III, § 3.2)

Sec. 8-223. Buffer.

A densely planted vegetative or dense naturally vegetative strip or a combination of the two that is not less than 50 feet in width, of continuous evergreen composition or other approved plants, trees, or shrubs native to the area, which must be not less than six feet in height within one year, shall be provided along all property lines (except for an ingress and/or egress that shall be not more than 30 feet in width). The planted and/or natural buffer must be maintained in a natural living condition at all times.

(Ord. of 5-19-97(1), Art. III, § 3.3; Ord. of 11-17-97(1), Art. III, § 3.3)

Secs. 8-224—8-230. Reserved.**DIVISION 4. PROCEDURE FOR SECURING APPROVAL OF A LAND CLEARING AND INERT DEBRIS LANDFILL****Sec. 8-231. Land clearing and inert debris landfill permit application procedure.**

(a) Prior to developing, opening or operating or expanding a land clearing and inert debris landfill the property owner, developer or operator shall make application to the Moore County Planning Board for a permit to develop, open, operate or expand such a landfill.

The applicant shall submit to the Moore County Planning Board no less than 15 business days prior to a regularly scheduled meeting, at least 15 black or blue line prints of the proposed landfill that has been prepared in accordance with the requirements of this article.

The applicant shall provide a list of the names and addresses of all adjacent property owners along with one set of business (#10) envelopes with typed addresses to each person on the list. These addressed envelopes and the list shall be submitted at least ten work days prior to the planning board public meeting at which the plan is to be reviewed. Certified mail with a return receipt requested must be attached to each prepared letter/envelope to insure property owner notification. These fees and all postage shall be paid by the applicant.

(b) The application shall contain a plan, drawn to a scale of 50 feet to one inch or larger and shall include the following:

- (1) The names and addresses of the property owner(s), operator(s) or developer(s) and the designer or registered surveyor or professional engineer, if the plans are drawn other than by the property owner, operator or developer.

- (2) Date, scale and approximate north arrow.
 - (3) Boundaries of the tract, parcel, plot or lot shown with bearing and distances.
 - (4) The site plan shall also show buffers, ingress and egress, surrounding land usage and any other specific information pertinent to the parcel, plot or lot.
 - (5) A vicinity map showing the location of the parcel, plot or lot.
 - (6) The names for each adjoining property owners shown on the parcel, plot or lot they own.
 - (7) Land contours with vertical intervals of not less than ten feet.
 - (8) When an expansion is being applied for, the size and location of any existing area that is being, operated as a land clearing and inert debris landfill.
 - (9) A letter or other certification of approval must be submitted from the North Carolina Department of Transportation, as to the safety and design of the access or entrance on to a state maintained street or road from the landfill.
- (Ord. of 5-19-97(1), Art. IV, § 4.1; Ord. of 11-17-97(1), Art. IV, § 4.1)

Sec. 8-232. Review of the proposed landfill plan.

(a) The Moore County Planning Board shall review the proposed landfill plan to determine if it is in accordance with the requirements set forth in this article.

(b) If the Moore County Planning Board, finds after, review that all requirements have been met, the plan shall be approved, approved with modifications or conditions or denied. If the plan is approved with modifications or conditions the modifications or conditions are to be attached in writing to the plan. Once approval, approval with modifications or conditions or the application is denied a copy of the plan with any modifications, conditions or reasons for denial shall be given in writing to the owner, operator or developer.

(c) In the case of denial because all the requirements of this article were not met, the plan maybe resubmitted when all requirements have been met, with no additional fee required, provided the plan is resubmitted within 90 days of the notice of rejection or denial.

(Ord. of 5-19-97(1), Art. IV, § 4.2; Ord. of 11-17-97(1), Art. IV, § 4.2)

Sec. 8-233. Issuance of compliance or permit.

(a) After approval has been given by the Moore County Planning Board the administrative official is authorized to issue a temporary land clearing and inert debris landfill compliance. The intent of this temporary land clearing and inert debris landfill compliance is to enable the property owner, developer or operator to secure a permit from all appropriate departments of the State of North Carolina and to enable the construction of any ingress, egress, buffer or other modification or conditions attached to the plan.

(b) If the proper permit has not been or is not obtained from all appropriate departments of the State of North Carolina and/or compliance with all the terms of approval by the Moore County Planning Board have not been completed within and 180 calendar days from the date of approval of the plan by the Moore County Planning Board, the plan and temporary land clearing and inert debris landfill compliance shall be null and void and a new application must be submitted.

(c) When the property owner, developer or operator has secured all the appropriate departments of the State of North Carolina permits and has completed all requirements for the plan, he shall apply to the administrative official for a landfill clearing and inert debris landfill compliance permit. The administrative official shall make an on-site inspection to insure that all requirements have been complied with before issuing such a permit.

(d) The land clearing and inert debris landfill permit issued to the applicant shall constitute the authority from Moore County to operate the landfill.

(e) Violation of any the requirements or provisions of this article or the permit constitutes grounds for refusing to issue or to revoke the land clearing and inert debris landfill permit. Operating a land clearing and inert debris landfill that is created, developed or expanded, as elsewhere provided in this article, after the adoption of this article, without a valid land clearing, and inert debris landfill permit is a Class 3 misdemeanor punishable by fine or imprisonment as provided by G.S. 14.4., subsection 8-214(a) and/or as elsewhere provided in this article.

(Ord. of 5-19-97(1), Art. IV, § 4.3; Ord. of 11-17-97(1), Art. IV, § 4.3)

Secs. 8-234—8-240. Reserved.

DIVISION 5. OTHER LEGAL PROVISIONS

Sec. 8-241. Jurisdiction.

Upon and after the adoption of this article these regulations shall govern each and every created, built, developed or expanded land clearing and inert debris landfill within the jurisdiction of the County of Moore, outside of the jurisdiction of any incorporated municipality.

(Ord. of 5-19-97(1), Art. V, § 5.1; Ord. of 11-17-97(1), Art. V, § 5.1)

Sec. 8-242. Severability.

Should any section or provision of this article be declared by a court of competent jurisdiction to be unconstitutional or invalid, such decision shall not affect the validity of this article as a whole or of any other section or provision thereof which is not itself declared unconstitutional or invalid.

(Ord. of 5-19-97(1), Art. V, § 5.2; Ord. of 11-17-97(1), Art. V, § 5.2)

Sec. 8-243. Amendments.

The board of county commissioners may from time to time amend this article. No amendment shall be adopted by the board of county commissioners until it has held a public hearing which has been duly advertised according to state law.

(Ord. of 5-19-97(1), Art. V, § 5.3; Ord. of 11-17-97(1), Art. V, § 5.3)

Sec. 8-244. Abrogation and conflicting regulations.

It is not intended that this article repeal, abrogate, annul, impair or interfere with any other existing easements, covenants, deed restriction, agreements, rules, regulations, ordinance or permits previously adopted or issued pursuant to law. However, where this article imposes greater restrictions, the provision of this article shall govern.

(Ord. of 5-19-97(1), Art. V, § 5.4; Ord. of 11-17-97(1), Art. V, § 5.4)

Sec. 8-245. Effective date.

This article is hereby adopted by the Board of County Commissioners of Moore County, North Carolina, and declared to take effect and be in force this the 17th day of November, 1997.

(Ord. of 5-19-97(1), Art. V, § 5.5; Ord. of 11-17-97(1), Art. V, § 5.5)

Secs. 8-246—8-275. Reserved.**ARTICLE VI. MINING REGULATIONS****DIVISION 1. PURPOSE AND INTENT****Sec. 8-276. Purpose.**

In addition to the foregoing preamble, it is the purpose of this article to ensure local citizen participation and adequate protection at the Moore County Government Level; to have an ordinance that is fair and reasonable, that protects the way of life of the citizens of Moore County and to protect the future growth of Moore County. No part of this article is intended to usurp or weaken the North Carolina Mining Act of 1971, or any state regulations pertaining thereto.

(Ord. of 9-2-97, § 1.1)

Sec. 8-277. Title.

This article shall be known as the Mining Ordinance of the County of Moore, North Carolina and may be cited or referred to as the Mine Ordinance.

(Ord. of 9-2-97, § 1.2)

Secs. 8-278—8-280. Reserved.**DIVISION 2. GENERAL PROVISIONS AND ADMINISTRATION****Sec. 8-284. Jurisdiction.**

Upon and after the adoption of this article these regulations shall govern each and every created, built, developed or expanded mine and mining operation within the jurisdiction of the County of Moore, except in zoned areas of the County of Moore, outside of the jurisdiction of any incorporated municipality.

(Ord. of 9-2-97, § 2.1)

