NASH COUNTY

SOLID WASTE MANAGEMENT PLAN
THREE YEAR UPDATE

FOR THE LOCAL GOVERNMENTS OF:

- Nash County
- Town of Bailey
- Town of Castalia
- Town of Dortches
- Town of Middlesex
- Town of Momeyer
- Town of Nashville
- Town of Red Oak
- City of Rocky Mount
- Town of Sharpsburg
- Town of Spring Hope
- Town of Whitakers

EFFECTIVE DATES:
JULY 1, 2012 – JUNE 30, 2022

Prepared by:

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Engineering for the Power and Waste Industries

Acknowledgements

The Nash County 10-Year Solid Waste Management Plan Update is written to include the participation of twelve local governments, including Nash County and the eleven municipalities located therein, which are: the City of Rock Mount, and the Towns of Bailey, Castalia, Dortches, Middlesex, Momeyer, Nashville, Red Oak, Sharpsburg, Spring Hope, and Whitakers.

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SUBMITTED TO:

NC DEPARTMENT OF ENVIRONMENT, HEALTH AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT
SOLID WASTE SECTION
PROGRAMS AND PLANNING BRANCH
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RALEIGH, NC 27603

This document is a local solid waste management plan update as required by North Carolina General Statute 130-309.09A(b).

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1.0 INTRODUCTION

A Solid Waste Management Plan for Nash County, North Carolina was initiated in the year 2000 and subsequently updated in 2003, 2006 and 2009 in accordance with General Statue 130A-309A (b) and the Solid Waste Management Act of 1996. The Plan is developed for the purpose of assisting the County in meeting their Solid Waste needs and recognizing measures to protect public health and the environment. In accordance with the regulation, the plan is to be updated every three years. This Plan represents the fourth revision to the 10-year SWMP for Nash County.

The specific statutory requirements that this plan seeks to follow include:

a) Evaluating the solid waste stream within the county,

b) Including a goal for the reduction of County solid waste on a per capita basis,

c) Being designed to achieve the solid waste reduction goals established by the plan,

d) Including a description of the process by which the plan was developed, including provisions for public participation,

e) Including an assessment of current programs and a description of intended actions with respect to the 13 required solid waste management methods and elements

f) Including a description and assessment of the full cost of solid waste management,

g) Considering the use of facilities and other resources for the management of solid waste that may be available through private enterprise, and

h) Including as a component, a written plan for the management of abandoned manufactured homes as required under GS 130A-309.113(a).

This Plan and its subsequent three year updates will be implemented to support the Nash County planning area, including the eleven municipalities within the county, to provide for the management of solid waste and solid waste reduction for the next ten years. Participating in the plan are Nash County and the towns of Bailey, Castalia, Dortches, Middlesex, Momeyer, Nashville, Red Oak, Rocky Mount, Sharpsburg, Spring Hope, and Whitakers.

1.1 SOLID WASTE FACILITIES

A map identifying the solid waste convenience centers and the single disposal facility located in Nash County is provided on Figure 1 – Nash County Solid Waste Facilities, in Appendix A.

1.2 NASH COUNTY GOVERNMENT

Nash County has seven elected County Commissioners who govern the county. The County Manager serves as chief administrator of the county and is responsible to the Board of County Commissioners for administering and managing all departments of the county government. The county seat is located in Nashville, the approximate geographic center of the county.

1.3 PARTICIPATION IN DEVELOPMENT OF THE PLAN

The Nash county Health Department and the Solid Waste Management division initiated the effort to develop the 2012 Update to the Plan. The information and data presented in the Update was obtained with cooperation of numerous sources, including Nash County staff, representatives of our local towns and communities; statistics compiled by the North Carolina Department of Environment and Natural Resources Division of Waste Management, from other agencies including the NC Cooperative Extension Service.

In order to receive input from all the local government jurisdictions involved in the planning process (as in previous years) representatives from the county and each local government were contacted to provide information and input to update the Solid Waste Management Plan.

1.4 PLAN UPDATE COMMITTEE

A team of the following entities and or representatives participated in the Plan Update:

NASH COUNTY	Bill Hill – Director of the Health Department
	Matthew Richardson – Solid Waste Manager
TOWN OF BAILEY	Becky Smith – Town Clerk
TOWN OF CASTALIA	Angelean Elliott – Town Clerk
TOWN OF DORTCHES	Gerald Batts - Town Administrator
TOWN OF MIDDLESEX	Jennifer Lambert – Town Clerk
	Dale Bachman – Public Works Supervisor
TOWN OF MOMEYER	Karen Hendricks – Town Clerk
TOWN OF NASHVILLE	Larry A. Williams – Director of Public Works
TOWN OF RED OAK	Carolyn G. Briggs – Town Clerk
CITY OF ROCKY MOUNT	Cameron Privott – Environmental Services Supt.
TOWN OF SHARPSBURG	Tracy Sullivan – Town Clerk
	Otis Ray – Utility Director
TOWN OF SPRING HOPE	John Holpe, Jr. – Town Manager
TOWN OF WHITAKERS	Diane Colfield – Town Clerk

1.5 PLANNING AREA GOALS AND INITIATIVES

Nash County and its partner communities have agreed to goals and specific initiatives to consider for the improvement of the solid waste management efforts in Nash County as follow and without priority:

- Provide non-interrupted and continuous solid waste collection and disposal service options to residents
- Provide opportunities to reduce disposal needs
- Effectively and efficiently provide disposal of construction and demolition wastes
- Protect public health and the environment
- Eliminate illegal dumping through a continued effort to increase awareness and enforcement of violators
- Implement and maintain State initiatives for reduction of waste and landfill bans
- Increase efforts to provide education and promote environmental consciousness

2.0 GEOGRAPHIC AREA AND POPULATION

The geographic area covered by this Solid Waste Management Plan includes Nash County and the municipalities and unincorporated areas within the county. The most recent population estimate provides as of July 2010, Nash County has approximately 96,215 residents. The 2000 population was 87,378 representing an estimated increase of 10.1%. Based on the 2000 census, Nash County is the 30th largest county in the state.

The largest percentage of Nash County residents live in Rocky Mount or unincorporated areas of the county with the next largest residential communities being Nashville and Red Oak. Table 2-1 below represents the population distribution for Nash County and its municipalities.

The population density of Nash County is approximately 178 persons per square mile.

2.1 POPULATION BY AREA

The County's population distribution is represented in Table 2-1 below:

TABLE 2-1

Local Government	Population (1)	Percent of Total (%)
Bailey	571	< 1%
Castalia	269	< 1%
Dortches	938	< 1%
Middlesex	825	< 1%
Momeyer	225	< 1%
Nashville	5,453	5.7%
Red Oak	3,443	3.6%
Rocky Mount (in Nash County)	40,098	41.7%
Sharpsburg	1,257	1.3%
Spring Hope	1,325	1.4%
Whitakers	343	< 1%
Nash County (Unincorporated areas)	38,468	40.0%
Total	96,215	100%

Note (1) – Population figures from North Carolina Office of State Management and Budget

2.2 DISCUSSION OF POPULATION CHANGES AND FORECASTS

Historical population numbers relating to waste disposal per capita can be found in Table 4-1.

2.3 DEMOGRAPHICS

The average (median) age of Nash County residents in 2010 was 40 years. The average (median) age in 2000 was 36 years.

Based on the 2000 Census information, the population of Nash County is represented by 51.5% of urban residents and 48.5% rural. The County per capita income was $18,863; the estimated per capita income for 2011 is $21,619. The median household income for the period 2006-2010 is estimated to be $44,499.

An estimated 81.8% of the County population 25-years and over are high school graduates and 19.1% hold a Bachelor's degree or higher.

The number of housing units in 2010 is estimated to be 42,286, and 37,762 are considered to be households.

2.4 DESCRIPTION OF GENERAL LAND USE

Nash County, located in the eastern North Carolina, covers 345,773 acres, for a total area of 542.71 square miles, with 540.33 square miles of land area. Nash County could be classified as either a northern coastal plain county or a far eastern piedmont county. It has a primarily rolling terrain with sandy soil, however, brick and tile clays are found along the Tar River, which flows through Nash County and Rocky Mount.

The unincorporated portion of the County accounts for 268,416 acres (419 square miles – 81.2% of total County acreage; the unincorporated area includes all areas outside municipal jurisdictions. Nash County boundaries are defined by five surrounding counties – Halifax County to the north, Franklin County to the west and northwest, Johnston County to the southwest, Wilson County to the southeast and Edgecombe County to the east. The Town of Nashville, located approximately in the geographic center of the County, is the county seat. Nash County is approximately 40 miles long north to south and 22 miles wide at the widest point. The County is served by 192 miles of primary highways and 746 miles of secondary roads. Approximately 25 miles of the secondary highway system consists of unpaved roads. The County is also served by approximately 130 miles of roadways located within municipal jurisdictions.

2.5 NOTICE OF PUBLIC MEETING

Notification of the public meeting is made through the advertisement of the December 2012 County Commissioners Meeting Agenda. The agenda runs in several local newspapers. A copy of the agenda is provided on the following pages.

3.0 WASTE CHARACTERIZATION AND EVALUATION

3.1 VOLUME OF SOLID WASTE LANDFILLED

Approximately 84,461-tons of solid waste from Nash County were landfilled in FY 2010-2011. This represents County C&D waste disposed at the County landfill and all other County wastes (MSW, C&D, Industrial) landfilled out of county as reported on the *North Carolina Solid Waste Management Annual Report*. An estimate of waste disposed by landfill type is shown in Section 3.5 below.

3.2 SOLID WASTE LANDFILLED IN THE COUNTY'S NAME – *RECENT HISTORY*

Since the last update to the Plan, the volume of County solid waste landfilled has decreased each fiscal year. Over the three year period, the volume of non-C&D Solid Waste landfilled has decreased 27,038-tons. Over the same period, the volume of Construction and Demolition (C&D) waste landfilled has reduced 7,627 tons. The volumes of waste landfilled over the past three years for each waste type respectively, is listed in Table 3-1:

TABLE 3-1

Waste Type	Fiscal Year	Volume (1) (tons)	Variance from previous year
MSW, Commercial & Industrial waste (2)	2008-2009	74,800	(23,005)
	2009-2010	71,285	(3,515)
	2010-2011	70,767	(518)
Reduction of Landfilled MSW Over the Three Year Period:			27,038
C&D Waste	2008-2009	11,223	(3,313)
	2009-2010	12,211	988
	2010-2011	6,909	(6,302)
REDUCTION IN C&D WASTE LANDFILLED OVER THE THREE YEAR PERIOD:			7,627
TOTAL REDUCTION IN SOLID WASTE LANDFILLED OVER THE THREE YEAR PERIOD:			34,665

Note (1) – figures are compiled as reported by each receiving landfill facility per the *NORTH CAROLINA SOLID WASTE MANAGEMENT ANNUAL REPORT*, required by all permitted disposal facilities and transfer stations

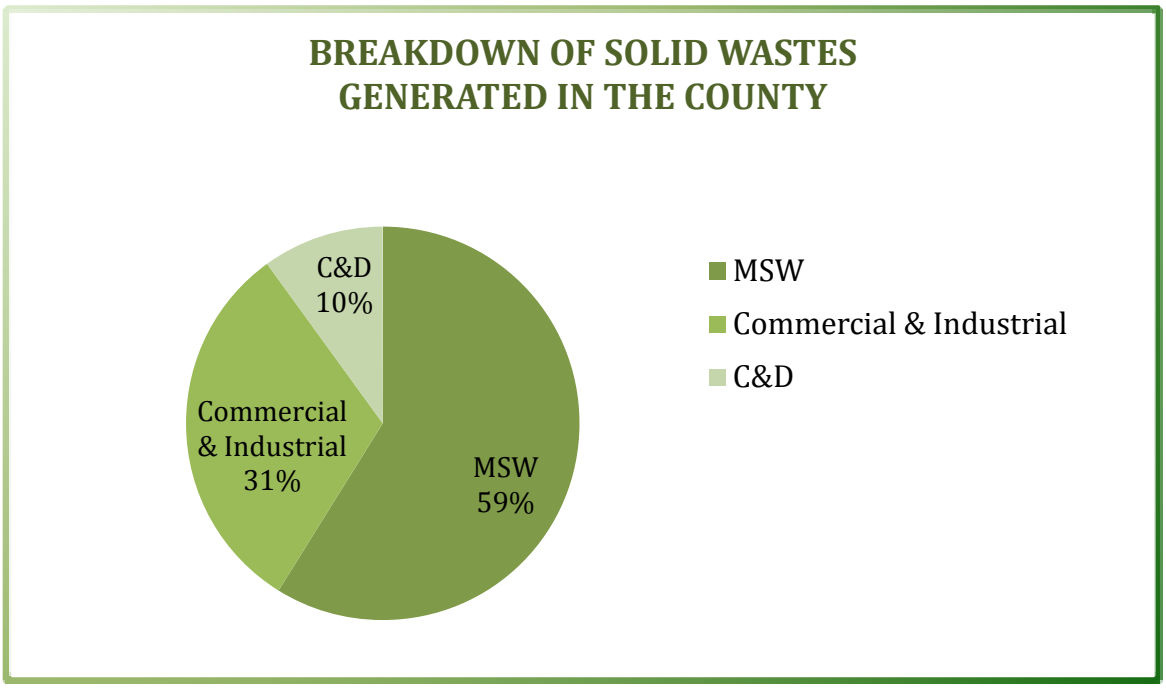
Note (2) – this represents the total waste disposed of in the County's name minus the C&D waste disposed of in the County's name for that same period. Commercial and Industrial wastes are not specifically included in Annual State reporting.

3.3 INDUSTRIAL SPECIAL WASTES

Industrial waste generators and generators of special waste are responsible to coordinate collection, delivery and permitted disposal of their wastes. Disposal of this waste should be identified as being received from Nash County, on the facility's *North Carolina Solid Waste Management Annual Report*. The generators are not specifically identified in this report.

3.4 WASTE CHARACTERIZATION BY GENERATOR

The following chart represents an estimated breakdown of wastes generated in Nash County by solid waste type.



- It should be noted that information from the Rocky Mount Transfer Station was used to interpolate the waste characterization for the County and therefore shall be considered only an indication of the breakdown of waste by type (for the County). Relevant information from other receiving facilities was not immediately available.

3.5 COUNTY MANAGED MUNICIPAL SOLID WASTE

Nash County solid waste department manages approximately 6,700 tons of municipal solid waste per year, or 8% of the MSW generated in the County in addition to managing the collection, disposal and or processing or C&D, yard waste and recyclables.

4.0 WASTE REDUCTION GOAL

4.1 BACKGROUND

In the baseline year of FY1991-92, Nash County's per capita disposal rate was 1.09 tons per person. The Waste Reduction Goal initiated in the 2006-07 Plan update was 10% or a reduction of 10,738-tons for a per capita disposal rate goal of 0.981 for FY2012-13.

The Nash County disposal rate for FY2011-12 was calculated to be 0.81-tons per capita representing a 26% reduction from baseline. Apparent from the figures provided in Table 4-1, waste reduction efforts in Nash County have shown progress and success in the past few years. For a measurement summary of this progress, see Table 4-1.

TABLE 4-1

FISCAL YEAR	POPULATION	WASTE DISPOSAL (tons)	Per Capita Disposal Rate (tons/person)	VARIANCE (from baseline)
1991-92			1.09	----
2001-02	88,346	66,484	0.75	-31%
2002-03	89,185	103,213	1.16	6%
2003-04	89,626	113,994	1.27	17%
2004-05	90,712	110,941	1.22	12%
2005-06	91,544	116,431	1.27	17%
2006-07	92,220	105,847	1.15	5%
2007-08	92,915	112,341	1.21	11%
2008-09	93,981	86,023	0.92	-16%
2009-10	95,804	83,496	0.87	-20%
2010-11	96,215	77,676	0.81	-26%

Note – population and waste disposal tons figures are compiled from *Annual Solid Waste Reporting* and the *"COUNTY WASTE DISPOSAL REPORT"* form.

4.2 WASTE REDUCTION GOALS

It is our task to compare per capita waste reduction goals with progress made toward the goals, and if necessary, adjust so that the waste reduction goal that encompasses ten years of planning, beginning with the due date year.

Nash County will endeavor with good-faith to achieve the State's solid waste reduction goal and comply with the State's solid waste management plan. The local waste reduction goals are set

with the intent of assisting the State to achieve the State's forty percent 40% municipal waste reduction goal as set out in G.S. 130A-309.04(c).

For inclusion in the Plan, the completed "*WASTE REDUCTION GOAL SHEET"* is provided in Appendix B. The waste reduction calculation section of the form is copied to Table 4-2 below:

TABLE 4-2

CALCULATION	FY 2021-22
1. Baseline year per capita disposal rate *(FY 1991-1992 unless alternate approved by Section)*	1.09
2. Percent waste reduction goal	35 %
3. Targeted per capita disposal rate (Subtract line 2 from 1.0 and multiply result by line 1)	0.7085
4. Estimated population in the new waste reduction goal year (Available at Office of State Budget and Management website: Projected Annual County Population Totals 2010-2019)	100,308
5. Projected tonnage for disposal at baseline disposal rate (Multiply line 1 by line 4)	109,336
6. Targeted annual tonnage for disposal (Multiply line 3 by line 4)	71,068
7. Targeted annual tonnage to reduce (Subtract line 6 from line 5)	38,268

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

4.3 WASTE REDUCTION

Given the targeted annual tonnage amount to be reduced, the County aims to increase waste reduction efforts by increasing outreach to residents, local governments and the business community to advance participation in the programs provided.

Additional initiatives contributing to achieving the waste reduction goals are included in specific focus areas of Section 6 – ASSESSMENTS AND ACTIONS.

5.0 SOLID WASTE MANAGEMENT AND HANDLING

The purpose of the section is to describe the primary method/process of handling and disposing of solid waste generated in the County. This will include a discussion of collection sites within the county, collection services, waste handling, transfer, and disposal by type for the following waste types from the geographic area covered by the plan:

a) Municipal Solid Waste (MSW)
b) Construction and Demolition Waste (C&D)
c) Land Clearing and Inert Debris (LCID)
d) White Goods (WG)
e) Scrap Tires (ST)
f) Electronics (ET)

5.1 MUNICIPAL SOLID WASTE (MSW)

Municipal solid waste (MSW) generated in Nash County is collected *at* County convenience centers, *by* local governments and private service providers. MSW collected at convenience site is hauled to the City of Rocky Mount Transfer Station; according to DENR Annual reporting, in addition, solid waste from the County has been reported to hauled to the three other transfer facilities in the region. The following is a list of the transfer stations, respective permit number and location, starting with the primary receiving facility:

FACILITY	PERMIT No.	LOCATION
Rocky Mount TS #2	6405T-TRANSFER-2001	Rocky Mount, NC
Other Transfer Facilities		
Edgecombe County TS	3302T-TRANSFER-1998	Rocky Mount, NC
Onslow Container Service	5408T-TRANSFER-2001	Deep Run, NC
WI-Black Creek Rd. TS	9808T-TRANSFER-2000	Wilson, NC

The Rocky Mount Transfer Station (TS#2) receives over 75% of the non-C&D waste generated in Nash County; just over 20% is hauled to the Waste Industries transfer station in Wilson, NC.

5.1.1 MSW Collection

- <u>The County operates nine convenience centers distributed throughout the county; these are drop-off locations for County residents.</u>

A figure showing the location of these facilities is provided on the following page. The collection sites primarily serve as a drop-off locations for residents who are not offered collection services, reside in an unincorporated area without government provided collection or chose not to engage in participate in residential collection offered by their local provider.

The Towns of Dortches, Momeyer, and Red Oak do not provide municipal solid waste collection services. Residents of these towns may pay an annual fee to the county and are provided access to the nine convenience centers within the county or contract with private collection service providers.

Residents choosing to engage with a private collection service may also have access to the convenience centers with payment of the annual fee.

5.1.2 Convenience Center Operations

Each site has a full time attendant. Sites are generally accessible in the spring and summer months, Mondays and Wednesday through Saturday from 7:30 am to 7:30 pm and Sunday from 1:30 pm until 6:30pm. During the fall and winter months, the sites are generally accessible Monday and Wednesdays through Saturday from 7:30 am to 6:30 pm and; Sunday from 1:30 pm until 6:30 pm.

Residential solid waste is accepted at each center in an enclosed compactor. Commercial and industrial wastes are not accepted at the County convenience sites.

Solid waste collected at the convenience sites in roll-off and compactor boxes are hauled to the Rocky Mount Transfer Station. The County contracts with a private hauler for collection and delivery of waste to the transfer station. The contract period is typically three-years. Waste Industries of Wilson, NC is currently the collection service provider.

The transfer station is operated by the City of Rocky Mount. Nash County has a contract directly with the City of Rocky Mount for tipping and transfer of solid waste.

Waste is hauled from the convenience center locations for disposal 2 to 3 times per week.

5.1.3 MSW Disposal

County MSW delivered to the City of Rocky Mount Transfer Station is transferred to the East Carolina Regional Landfill in Bertie County. According to DENR Annual reporting, waste is reported to have been transferred to additional landfill facilities. The following is a list of disposal facilities, respective permit numbers and location, starting with the primary receiving facility:

FACILITY	PERMIT No.	LOCATION
East Carolina Regional Landfill	0803-MSWLF-1993	Aulander, NC
Other Disposal Facilities		
Uwharrie Environmental Regional Landfill	6204-MSWLF-1995	Mt. Gilead, NC
WI-Sampson County Disposal	8202-MSWLF-2000	Roseboro, NC
Richland Landfill	U0050-MSWLF-	Elgin, SC

5.2 CONSTRUCTION AND DEMOLITION WASTE (C&D)

Construction and demolition waste generated in the County are collected at convenience center (residential and small jobs); collected by private haulers or delivered directed to the County C&D landfill.

The primary disposal destination for construction and demolition waste generated in the County is the Nash County C&D Landfill. According to DENR Annual reporting, C&D waste is reported to have been disposed at additional facilities. The following is a list of the C&D disposal facilities, respective permit number and location, starting with the primary facility:

FACILITY	PERMIT No.	LOCATION
Nash County C&DLF	6403-CDLF-2000	Nashville, NC
Other C&D Disposal Facilities		
Red Rock Disposal, LLC	9228-CDLF-2001	Holly Springs, NC
C & D Landfill Inc.	7407-CDLF-2009	Greenville, NC
Edgecombe County CDLF	3301-CDLF-1997	Tarboro, NC

5.2.1 Nash County C&D Landfill

Nash County owns and operates a 375-acre Solid Waste Management Facility located approximately 1-mile west of the intersection of Taylor Store Road and SR 1411 (Dukes Road) on the southern side and adjacent of SR 1411. The Facility is comprised of two distinct facilities including includes the Closed MSWLF Landfill Facility and the C&DLF Facility. The Closed MSW Landfill Facility Boundary is 188-acres. The C&DLF Facility Boundary is 187-acres.

The Solid Waste Management Facility provides numerous functions including, but not limited to:

1) Construction and Demolition Landfill (C&DLF)

2) Closed Municipal Solid Waste Landfill (MSWLF)

3) Yard Waste Collection

4) White Goods Collection

5) Waste Tire Collection

The C&DLF Facility accepts the following types of wastes for Disposal:

A. Construction and Demolition (C&D) Waste: "C&D solid waste" means solid waste generated solely from the construction, remodeling, repair, or demolition operations on pavement and buildings or structures.

B. Inert Debris: “Inert Debris” is defined as solid waste which consists solely of material that is virtually inert, such as brick, concrete, rock, and clean soil.

C. Asphalt: In accordance with G.S. 130-294(m).

D. Non Friable Asbestos: In accordance with 40 CFR 61.

E. Land Clearing Debris: As defined in G.S. 130A-290, specifically solid waste which is generated solely from land-clearing activities, such as stumps, trees, etc.

5.2.2 Capacity

As of June 19, 2012, It is estimated approximately 172,881 CY of airspace remains between the June 19, 2012 topographic survey and the proposed top of intermediate cover design grades. Using the cumulative waste density of 727-lbs/CY, the Nash County C&D Landfill has approximately 62,842 tons of waste disposal capacity remaining. Assuming incoming waste volume of 10,000 tons/year for 2012 and an annual growth rate of 2.0% for every future year, the Nash County C&D Landfill will reach capacity in 2018. The remaining life of the facility is directly dependent on the volume of waste disposed and the waste density achieved.

5.2.3 Convenience Centers

C&D waste is accepted at the County convenience centers from residents with loads not exceeding 200 pounds (per job/project). Bulky C&D waste is not accepted at the County’s convenience sites.

5.3 LAND CLEARING AND INERT DEBRIS (LCID)

Land Clearing and Inert Debris wastes are accepted at the County C&D Landfill. Yard waste, small tree limbs and yard clippings are accepted at County convenience centers from residents in small manageable quantities. County yard waste is directed to the County landfill site; yard

waste is collected, comingled, and reduced in size for reuse as mulch. Inert debris material is disposed of in the C&D landfill.

Yard waste material is ground once per year for use as mulch material. Grinding and mulching is typically contracted to the City of Rocky Mount.

The local towns in the County may provide collection and mulching of yard waste debris. This is summarized in Table 5-1.

5.3.1 Mulching Program

The County operates a yard waste mulching program. Yard waste is collected or transferred to the mulching area located at the C&D landfill. Yard waste is ground into mulch at the site. The mulch is utilized in landscaping projects and maintenance at Nash County government buildings. In addition, the mulch is used to improve vegetative growth potential of the cover soil applied to the C&D landfill.

During 2011-2012, approximately 1,650-tons of yard wastes were collected by the County. In addition to the County program, the local towns listed in Table 5-1 collect and/or operate sites for stockpiling and/or mulching of yard waste. The towns that have yard waste collection grind the waste and provide mulch to their residents. Local towns within the county may elect to participate in the County program.

TABLE 5-1

Location (Owner/Operator)	Materials Accepted	Estimated Volume Collected (1)
Town Of Bailey	Leaves, cut tree limbs	700 tons
Town Of Middlesex	Leaves, cut tree limbs	150 tons
Nash County *(County)*	Leaves, tree limbs; Christmas trees, etc.	1,650 tons
Town Of Nashville	Leaves, tree limbs; Christmas trees	102 tons
City of Rocky Mount	Leaves, tree limbs; Christmas trees, etc.	N/A
Sharpsburg	Leaves, tree limbs	1,622 tons
Spring Hope	Leaves, tree limbs	195 tons
Whitakers	Leaves, tree limbs	N/A
Total Yard Waste Collected FY 2011-12		4,419 tons

General Note: information presented in Table 5-1 provided by FY2011-12 "*Solid Waste and Materials Management Annual Report*", completed and submitted by the respective local government

Note (1) – volumes reported converted to tons by using a conversion rate of 400 pounds per cubic yard as recommended on the Annual Report form.

5.3.2 Rocky Mount

Rocky Mount provides residential collection of yard waste (limbs, tree debris, grass clippings, shrubbery, and loose leaves) on a weekly basis; they provide ground mulch at no cost to residents. The material is available to the public on specific days and times at the City's compost site at 1244 Arrow Road.

5.3.3 Storm Events

Hurricane Irene occurred in the fall of 2011. The Nash County C&D Landfill site was used as a yard waste debris staging area. Approximately 24,322-tons of vegetative debris was collected at the facility, stockpiled and burned. The resultant material was spread to an approximate thickness of 1-foot over a 5-acre area. This volume is accounted for separate of the volumes collected in Nash County as part of the solid waste management program.

5.4 WHITE GOODS

White goods are collected at all convenience center sites. White goods that contain or may have contained refrigerant shall be delivered to the County landfill convenience site location. There is

no charge for accepting the white goods or refrigerant removal. White goods are also accepted at the landfill site from small businesses as long as the amount is not excessive.

- Scrap metal and white goods metal is loaded and hauled for recycling by *Omnisource*.

Local towns in the County have the opportunity to participate in the County program.

5.4.1 Local Towns

Rocky Mount collects white goods from individual residences upon scheduling a pick up; collected units are hauled to the County C&D Landfill. Additionally, white goods are collected by the local towns and/or their collection service provider, including Spring Hope, Sharpsburg, Nashville and Middlesex. White goods curbside collection typically requires a special call for pick up.

5.5 SCRAP TIRES

Trailers for the collection of Scrap Tires area located at the County landfill site and the Stoney Hill convenience center site. Trailers are also located at 6 tire dealer facilities in the county and 1 in the City of Rocky Mount. Rocky Mount will collect tires from individual residences upon scheduling (2 tires per collection).

There is no charge to residents; however, tires must be removed from the rim. It is the responsibility of the tire owner, dealer or collector to load tires into the trailer.

Scrap tires collected in the County are hauled to Central Carolina Holdings for processing and/or disposal.

- *Central Carolina Holdings* operates by Permit No. 43-08, issued by the North Carolina Department of Environment and Natural Resources (NCDENR)

5.6 ELECTRONICS

Nash County operates a drop-off recycling program for the collection of electronic wastes. Electronic wastes as described in Section 6.10.3 are collected at the County Convenience Sites from county residents.

- Wastes are stored on pallet for pick-up by a State recycling contractor, *Creative Recycling.*

Local towns in the county for the exception of Rocky Mount do not have electronic waste programs. Rocky Mount provides curbside collection of electronic items at residential locations; items are delivered to RM Environmental Services facility for staging prior to recycling.

5.7 OTHER

The County's Solid Waste Program provides a drop-off recycling opportunity at each of its nine convenience centers for every residential household in the county that is paying the county

recycling fee to participate. This generally includes county residents and the residents of Dortches, Momeyer, and Red Oak.

Since 2006, the county has converted the majority of its recycling program from separate bins for specific items, to containers for comingling (plastic bottles/containers, cans, glass bottles, newspapers, junk mail, cereal boxes, plastic bags, etc.). Separate containers are still provided for recycling of corrugated card board and scrap metal.

- Three of the convenience sites have compactor boxes; 6 of the site have 40-yd^3 closed top roll-off boxes for the collection of recycling.
- The convenience sites also have containers for used oil and oil filters, reusable clothes and books, batteries, antifreeze (1), and cooking oil.
- Management of other materials collected for recycling is described in the following Section (*6 – Assessment and Action*).

6.0 ASSESSMENT AND ACTIONS

The Nash County Solid Waste Department is continuously assessing the management of solid waste in order to improve the programs provided. This section provides a summary of the current programs and a description of actions that may be considered, including a discussion of the following programs or solid waste management opportunities:

1) Reduction at the source
2) Collection
3) Recycling and Reuse
4) Composting and Mulching
5) Incineration with Energy Recovery
6) Incineration without Energy Recovery
7) Transfer of Waste
8) Disposal
9) Education
10) Management of Special Wastes
11) Prevention of Illegal Disposal and Management of Litter
12) Purchase of Recycled Materials

6.1 REDUCTION AT THE SOURCE

Source reduction includes efforts to reduce the volume of solid waste produced. For the purpose of this Plan, source reduction will be considered waste prevention, finding ways to reuse or otherwise manage materials so that they never enter the waste stream.

6.1.1 Current Programs

- County and municipalities participate in the Keep America Beautiful (KAB) campaigns
- KAB provides information and presentations to schools and community events, including offering Waste Reduction assessments and presentations to businesses in the two counties.
- Presentations to civic organizations, Boy Scouts, schools by County government leaders; presentations include the promotion of Environmentally Preferable Purchasing (EPP) or purchase of products manufactured from recyclable materials or products that consist of a high percentage of recyclable materials.

6.1.2 Initiatives to Improve Source Reduction

Enhance efforts to reduce our waste volumes at the source by:

- ❑ Implement program at the convenience centers to distribute and promote reusable grocery bags, drink containers, etc. Solicit sponsors to provide the items to include logo or advertising campaign.

- Evaluate an initiative for County Government to accept electronic correspondence for invoicing thus reducing the volume of waste paper and need for cardboard storage boxes
- Review if an opportunity or interest exists for a community advisory group to introduce and promote additional initiatives; this should consist of a member from each community.
- Introduce the topic of Source Reduction on the website, include definition and examples

6.2 COLLECTION

6.2.1 Current Programs

The County operates nine convenience centers that serve as a drop-off location for solid waste from County residents. MSW collected at the County convenience centers is hauled by contract hauler to the Rocky Mount Transfer Station.

The municipalities of Rocky Mount, Middlesex, Nashville, and Whitakers provide curbside collection for residential customers with town forces. The towns of Bailey, Castalia, Sharpsburg, and Spring Hope are engaged in contracts with private haulers for collection services. The local service provider may also provide some collection services to small commercial businesses.

Generally, local towns are providing curbside collection services occur once a week; however, Whitakers provides collection twice per week. Solid waste collection for commercial and industrial generators is provided for a fee.

Private haulers providing collection services generally deliver waste to the Rocky Mount Transfer Station, operated by the City of Rocky Mount or the transfer station located in Wilson operated by Waste Industries. It is the responsibility of the private hauler to establish services with the transfer station or disposal facility.

6.2.2 Initiatives to Improve Collection of Solid Wastes

- Review opportunity for consolidation of services for local towns for the purpose of reducing costs
- Evaluate potential to consolidate contracted services for the purpose of increasing efficiency and potential reduction of costs
- Evaluate costs effectiveness for the County purchase of a roll-off truck for loads coming from the convenience sites to the C&D landfill site
- Negotiate new long term contract with County service provider or initiate new RFP for collection services
- Rocky Mount: The City continues to evaluate more efficient methods of msw residential collection and will be implementing two automated collection routes this fall. Their goal is to expand this method of collection in identified residential areas in

coming years. This will require replacement of many existing roll out carts, many of put into circulation up to 20 years ago upon the initial conversion to curbside service. This investment will also reduce the need to make repairs to these aging carts.

6.3 RECYCLING AND REUSE

- The County operates a Drop-off Recycling Program
- Local governments in the County operate Recycling Programs as identified in Table 6-1.
- Local government recycling programs in Nash County yielded an estimated total of 1,423 tons of non-special waste recyclables in the FY 2011-2012.

6.3.1 Description of Recycling Programs

The County's Solid Waste Program provides a drop-off recycling opportunity at all nine convenience center locations. This program is for residential households in the county paying the county recycling fee. This generally consists of residents in unincorporated areas of the county and the residents of Dortches, Momeyer, and Red Oak.

Recyclables are generally comingled expect for special wastes (oils, batteries, liquids, electronics, etc.), corrugated cardboard and scrap metal.

A summary of recycling programs in the County is provided in Table 6-1 on the following page.

TABLE 6-1

Local Government	Recycling Program	Provider
Bailey	Drop-off; central collection site (15 yd^3 roll-off)	Town
Castalia	Curbside collection - Comingled	Town
Dortches	Convenience center drop-off	Nash County
Middlesex	Curbside collection - Comingled	Town
Momeyer	Convenience center drop-off	Nash County
Nashville	Curbside collection - Comingled	Waste Industries
Red Oak	Convenience center drop-off	Nash County
Rocky Mount (1)	Curbside; Comingled; every other week	City
Sharpburg	Curbside collection - Comingled	Waste Industries
Spring Hope	Curbside; Comingled; every other week	Waste Industries
Whitakers	Curbside collection - Comingled	Waste Industries
Nash County (Unincorporated areas)	Convenience center drop-off	Nash County

- Note (1) – Rocky Mount provides residential curbside collection to single family homes, and some multi-family locations. Four drop-off sites are provided for residents of multi-family complexes and other City residents. Rocky Mount's recyclables are delivered to Sonoco Recycling in Raleigh, white goods are carried to the Nash county C & D landfill and yard waste materials are taken to the City's compost sited on Arrow Road.
- Nash County contracts with Waste Industries (WI) for hauling of mixed recyclables to Sonoco Recycling in Raleigh, NC. The contractor receives revenues from the sale of recycled materials.
- Nash County Drop-off Recycling Program serves 18,500 households comprised of the unincorporated areas of the County.
- Nash County Community College program – *Green Day Event*
- There is not a County program for Commercial or Industrial recycling; this responsibility lies with the respective entity.

6.3.2 Special Event Recycling

KAB coordinates recycling campaigns throughout the year, including:

- Telephone book recycling (Annual event scheduled in May)
- Electronics annual shred-a-thon (Annual / November)
- Prescription drug collection (Annual / November)
- America's Recycling Day (Annual / November)

6.3.3 Initiatives to Increase Recycling and Reuse

- ❑ Continue operating collection sites at convenience centers; introduce and promote "clean-up days" for collection of recyclable materials from homes
- ❑ Install compactor boxes for recyclables at two additional convenience site locations:

  Currently, 3 convenience sites have compactor boxes for collection and consolidation of recyclables. Through State grant opportunities, two additional compactors are planned for October 2012. The compactor boxes provide additional tonnage capacity, resulting in fewer hauls and potential for reduced costs. A mid-term goal is to have compactor boxes for recyclables at all nine convenience sites.
- ❑ Inspect incoming C&D loads for the existence of scrap metal; sort suspect load and pull scrap metal prior to disposal for recycling.
- ❑ Increase efforts at the convenience centers to recognize recyclables; notify users if recyclable materials are included in their load
- ❑ Rocky Mount: the City began a pilot program to 2,900 households in the City using 96-gallon rollout carts on a bi-weekly collection schedule. The program will add an additional 1,100 households in Fall 2012
- ❑ Scrap metal – review opportunities with bordering county to consolidate contracts or services
- ❑ Review opportunities for other recycling markets, i.e. gypsum / wallboard
- ❑ Electronics – expand the program to local towns
- ❑ Track recycling efforts of individual business and industry in the county
- ❑ Increase outreach to the business community to gauge current status of recycling efforts and or to introduce recycling opportunities
- ❑ Review the status of pallet recycling at county businesses and industries

6.4 COMPOSTING AND MULCHING

The county provides yard waste collection for the purpose of keeping the county free of piles of yard waste debris and to provide a means of reducing the material by grinding to provide mulch

material for county projects and maintenance, landfill stabilization efforts and providing mulch to residents for a nominal fee.

- The county operates a Drop-off Program for the collection of yard waste; the yard waste is collected at the County C&D Landfill
- Yard waste is collected in open top 40yd^3 roll-off boxes; typically, a load is hauled to the landfill site once for some location and two to three times for higher volumes convenience sites.
- Approximately 1,650 tons of land clearing and yard waste was collected in FY 2011-12
- Rocky Mount provides weekly curbside collection of vegetative materials at single family residences. The City also offers the use of three trailers for a nominal fee for residential use to haul yard waste. Loose leaf collection is provides by the Streets Division at curbside during November, December and March
- The Town of Spring Hope provides curbside yard waste collection; they contract the service.
- There is no active county composting program
- Materials promoting backyard composting are available and distributed by municipalities
- Castalia considered providing yard waste collection for additional cost but the interest did not justify the service

6.4.1 Initiatives to improve the composting and mulching program

- ❑ Work with local Cooperative Extension Agency to gauge community interest in composting program
- ❑ Evaluate interest in pilot program with Nash County Community College
- ❑ Require land disturbance permits to specify land clearing debris end use or otherwise mandate it to be delivered to the county site
- ❑ Coordinate some effort with local fire authorities to manage burned debris vs. material for reuse
- ❑ As current, it has been determined that a market opportunity to justify an increase in the mulching program does not exist

6.5 INCINERATION WITH ENERGY RECOVERY

Incineration with energy recovery is not a current part of the Nash County Solid Waste Management Plan.

6.5.1 Initiative to Implement or Utilize Incineration with Energy Recovery

Incineration of County solid waste for energy recovery is not currently being considered; however, if landfill capacities are compromised and disposal options are consequently limited,

this may be a consideration if a permitted waste to energy facility exists in proximity to Nash County.

6.6 INCINERATION WITHOUT ENERGY RECOVERY

Incineration is not a current part of the Nash County Solid Waste Management Plan

6.6.1 Initiative to Implement or Utilize Incineration without Energy Recovery

Incineration of County solid waste is not currently being considered; however, if landfill capacities are compromised and disposal options are consequently limited, and a viable waste to energy facility does *not* exist, this may be a consideration.

6.7 TRANSFER OUTSIDE THE GEOGRAPHIC AREA COVERED BY THE PLAN

Municipal solid waste generated in Nash County is directed to the Rocky Mounty transfer Station, operated by the City of Rocky Mount. The waste is consolidated with waste collected from other sources and transferred to East Carolina Environmental Regional Landfill, operated by Republic Services. The City of Rocky Mount contracts hauling of waste to the East Carolina facility.

- The transfer facility is permitted to receive solid waste generated within Nash and Edgecombe Counties, and Town of Enfield, NC. Waste must be transported for disposal to the East Carolina Landfill in Aulander, North Carolina. The transfer station is not currently accepting waste from Enfield.
- The transfer facility is designed to handle 700-tons per day. Currently, the facility manages approximately 270-tons per day.

The collection and delivery of solid waste to the transfer station is the responsibility of the service provider whether public or private, or as agreed upon contractually with the municipality.

Commercial and industrial solid waste generators are responsible to contract collection and disposal services out of the county.

6.7.1 Initiatives to Modify the Current Transfer of Solid Waste

Nash County does not currently intend to provide disposal capacity within county borders; therefore, transfer of waste outside the area covered by this plan is planned to continue. There are no plans to change the delivery of solid waste to the Rocky Mount transfer station and transfer of waste to East Carolina Regional Landfill (ECRLF). Initiatives to modify the current transfer of solid waste include:

- ❑ Evaluate opportunity to contract long term with ECRLF
- ❑ If conditions are present as to where the current scenario is compromised and the opportunity for County solid waste to be delivered to the transfer station is restricted, it may be necessary to consider direct delivery to a regional landfill or the introduction of a transfer station in the county.

6.8 DISPOSAL

6.8.1 Disposal Capacity

- The East Carolina Regional Landfill in Bertie County has approximately 26 years of remaining capacity based on FY2010-11 figures, according to the FY2010-11 *North Carolina Solid Waste Management Annual Report*.
- The County C&D landfill currently has capacity through 2018, at anticipated volumes similar to current.

6.8.2 Initiatives to Modify Current Disposal of Solid Waste

Nash County does not currently intend to provide disposal capacity within county borders beyond the C&D landfill. If conditions are presented where the current scenario is compromised and the opportunity for transfer of County solid waste to the East Carolina facility is limited, it may be necessary to consider direct delivery or transfer to another landfill facility in the region.

- ❑ MSW Disposal: In such case the region's landfill disposal capacity is compromised, it may be beneficial for bordering counties to consolidate efforts to seek or provide economically practical disposal capacity for the region.
- ❑ Recycling and Waste Reduction: Initiatives to reduce the volume of solid waste generated, increase recycling efforts and reduce the necessity for disposal capacity shall be continuous providing they are effective and affordable; however, it is not anticipated the need for disposal capacity will be entirely eliminated.
- ❑ C&D Landfill: the County is preparing to expand the C&D landfill to ensure long term capacity beyond the currently permitted. Initial engineering work has been initiated.

6.9 EDUCATION WITH THE COMMUNITY AND THROUGH THE SCHOOLS

Representatives of County government coordinate programs at County schools to inform students and county employees of the importance of conserving resources, reduction at the source, recycling and proper disposal awareness.

Presentations include information on recycling opportunities in the county and vicinity, the C&D landfill asset and its operations and the comprehensive solid waste management program.

- The Rocky Mount Environmental Services Division provides brochures for new residents and provides information about Division services on the City's website. Recycling messages are also available on the City's public access channel.
- Public education and outreach continues to be a focus of the Keep America Beautiful program which is funded by the City of Rocky Mount, Edgecombe County and Nash County. The Keep America Beautiful Coordinator conducts community and school presentations; continues to work with the Nash-Rocky Mount public schools and Edgecombe County Public Schools to promote litter prevention and recycling education; sponsors a community paper shredding and e-waste recycling collection event in Rocky

Mount for America Recycles Day and in Tarboro for Earth Day; four week Telephone book Recycling Campaign in Rocky Mount and Tarboro to promote recycling and man the Keep America Beautiful display at a variety of public venues (Rocky Mount Business Expo, International Festival of Cultures, Kid's Day Celebration, Cummins Rocky Mount Engine Plant Health, Safety and Environment Day, Spring Garden Symposium, etc.).

6.9.1 Other Initiative and Programs

- KAB sponsored *Litter Art Show* Program – Annual event coordinated with public and private schools focused on litter prevention and the importance of recycling
- KAB – partners with Harrison YMCA summer camps and Spaulding Family Resource Center for educational presentations promoting recycling and conscious purchasing
- Nash County 4H – *Annual Booth Fair*
- Nash County Community College – *Green Day Event*

6.9.2 Additional Educational Opportunities

- ❑ Provide educators a list of educational resources
- ❑ Work with Cooperative Extension Agency to provide informational programs on composting, animal carcass disposal, etc.
- ❑ Introduce source reduction programs within the Community College system
- ❑ Improve functionality of solid waste program website; provide links to additional resources
- ❑ Evaluate opportunities using social media (facebook, twitter, etc.)
- ❑ Propose public outreach position potentially through internship via NCCC
- ❑ Include provisions for providing education and resource materials in contracts with solid waste provider (haulers, recyclers, etc.)
- ❑ Address language barrier issues if applicable

6.10 MANAGEMENT OF SPECIAL WASTES

This section addresses the management of special waste including but not limited to scrap tires, white goods, electronics, abandoned manufactured homes, household hazardous waste, fluorescent lights, and oil filters.

6.10.1 Scrap Tire Management

- Scrap Tires are collected at the County landfill (2-trailers) and 1 convenience site (Stoney Hill); scrap tires are also collected at five private locations (tire dealers) and the City of Rocky Mount.
- Tires are loaded directly into trailers in a laced pattern by the tire hauler/collector

- The contracted recycler/tire processor is Central Carolina Holdings; the contractor is notified when a trailer is full. A load is hauled 2 times per week (landfill).
- Loaded tires are inspected frequently to monitor the efficiency of the stacking effort. Outgoing loads area weighed; weights are reviewed as to why a load may be light of the 10-ton average goal or heavier in terms of repeating the occurrence. Loads that are not full are not transported.

6.10.2 Considerations to Improve the Management of Scrap Tires

- ❑ Initiate discussion with local governments to ensure tires are being properly collected and processed; track collection volumes from local towns
- ❑ Review procedures with other governments and collection facilities to improve techniques and efficiency, thus reducing the number of loads

6.11 WHITE GOODS

- White goods are collected at all 9 convenience site locations; units containing or at one time containing refrigerant gases are accepted at the landfill location only.
- Removal of refrigerant gasses is contracted to *Omnisource* of Smithfield, NC. The contractor's technician shall provide a record of the number of units serviced upon exit from the property. The contractor shall provide a record of final disposition of the gasses once complete and prior to payment of services. Records are maintained at the landfill scalehouse office.
- Refrigerant bearing white goods are being kept separate from non-refrigerant units.
- White goods are handled with a clawed excavator; refrigerant is removed prior to machine handling
- White goods are hauled off approximately every two months when pad is considered full. The recycler transports the scrap metal for recycling.
- The County collected 505-tons of white goods for recycling in FY2011-12
- Local towns in the county have special collection of white goods.

6.11.1 Considerations to Improve the Management of White Goods

- ❑ Coordinate efforts with local towns to ensure white goods are properly collected and processed for recycling and records of such efforts are demonstrated by documentation
- ❑ Evaluate incorporating collection efforts of local towns into the county program

6.11.2 Electronics

In order to be eligible for the annual distribution of funds for the State Electronic Waste Management program, the following criteria are addressed as part of this solid waste management plan:

- The County operates a Drop-off Recycling Program for the collection of used or discarded computer equipment, televisions, and other electronic devices. The program commenced in July of 2008.
- Electronic waste is accepted at all nine convenience site locations
- Collected materials are stacked on pallets or input in cardboard crate type boxes. Once considered full, the recycler is notified for a pick-up. The recycler secures the stacked materials on the pallet with shrink wrap for transporting.
- The recycler makes pick-ups approximately once per week
- The wastes are weighed by the recycler at their location. Weight records are provided to the County. The recycler provides a breakdown of materials collected by type and number of units, including but not limited to personal computers, monitors, televisions, and other electronic devices.
- Electronics are collected and recycled by *Creative Recycling* (State contract holder).
- Information to advertise the program is included on the County website. The program is described in school presentations.
- The County has initiated separate accounting line items to account for the expenditure of funds received pursuant to this section.
- Rocky Mount: The City of Rocky Mount provides weekly collection of electronic items at residential location which are returned to the Environmental Services complex where they are staged for recycling. The Keep America Beautiful program and the City of Rocky Mount sponsor and Electronics Recycling Drive at Golden East Crossing Mall annually in November that includes the collection of computer, network and office equipment, VCR/CD/DVD players, radios, phones, batteries and electronic games. Rocky Mount advertises for residents to take computers, electronic equipment, and batteries to Tri County Industries in Rocky Mount.

A revised copy of the Electronics Management Plan is provided in Appendix C. A copy of the Recycler's Certification is included in the Plan.

6.11.3 Considerations to Improve the Management of Electronics

- ❑ The Solid Waste Department intends to notify and review the program with other units of local government to provide or receive services concerning disposal of discarded computer equipment, televisions, and other electronic devices.
- ❑ Review possibility of Staff transporting the collected units to the landfill site to provide one point of collection for the recycling contractor

6.11.4 Abandoned manufactured homes

The intent of the Nash County Abandoned Manufactured Home Planning Initiative Program (AMHPI) is to assist home owners and property owners in the removal of abandoned manufactured homes. The AMHPI is a management program aimed to reduce and ensure proper disposal of abandoned manufactured homes. The goal is to reduce the exposure that

abandoned properties may present, thus protecting the health, safety, and general welfare of the citizens of Nash County. Through safe removal, demolition, and reuse of abandoned manufactured homes and components, the County foresees benefits to maintained property values, a reduced exposure to pollution, and elimination of the aesthetic unpleasantness of abandoned homes and properties.

Measures are taken to ensure the proper disposal of demolition debris and the reuse or recycling of the homes components. The program limits to the removal of one (1) home per parcel in the County. Acceptance into the program is based upon a site inspection and the discretion of Nash County Planning Department. The program offers financial and personnel support to remove the units from properties located throughout Nash County. Homes that have suffered fire damage or are located within a manufactured home park, are not eligible for the program. The following describes the protocols of the program:

- Nash County's provides removal of abandoned and dilapidated mobile homes free of charge
- Property owner participation is voluntary
- The County posts notification in local newspapers and on the county website advertising the service; letters are sent to property owners where staff have identified an abandoned or dilapidated home to advise them of the program.
- Criteria for acceptance: property owners wishing to participate are required to complete and submit an "*ABANDONED MANUFACTURED HOME PLANNING INITIATIVEDEMOLITION & REMOVAL APPLICATION"* for consideration into the program. In cases of rental units, no more than one home per property owner is accepted per year.
- Recycling: Contractors performing the demolition work are encouraged to recycle as much as practical. Contractors are required to submit weigh tickets for all resultant C&D waste disposed as well as a record of materials recycled.
- Disposal: Each unit is either demolished on-site (property) or transported as a unity to the County C&D landfill.

A copy of the Abandoned Manufactured Home Planning Initiative Program is provided in Appendix D

6.11.5 Household Hazardous Waste (HHW)

The Cooperative Extension Service holds pesticide/insecticide/herbicide collection day in April on odd numbered years. This is the only HHW collection program active in Nash County. The estimated volume of material collected is 6 tons.

Additionally, Nashville Crop Production Services farm supply dealer in Nashville provides a container for the recycling of empty plastic pesticide containers. Such containers are accepted free of charge, as long as they are empty and rinsed, and have any metal, paper labels, and the caps removed.

These programs are considered to be permanent. The estimated percentage of the county utilizing the programs described is 5%.

- Nash County does not have an active program for the collection of Household Hazardous Wastes
- Over the past few years, only a few inquiries have been received regarding collection of HHWs; the demand for a County program is considered low.

Considerations to Improve the Management of HHW's

- ❑ The Solid Waste Department shall review the possibility of initiated a collection program for household hazardous wastes.

6.11.6 Other Recyclable Special Wastes

6.11.7 Lead Acid Batteries

Most automobile parts/service stores that sell lead acid batteries collect the used batteries from their respective customers. In addition, the County accepts batteries at convenience site locations.

- Lead acid batteries are collected at 8 of the 9 convenience site locations (not Vicks -NC 58 South site; due to proximity to Sapony Creek and subsequent potential for flooding)
- Batteries are stacked on concrete pads at the convenience sites.
- Batteries are collected North State Battery and transported to Wilson for processing
- Only 21 batteries were collected for recycling in FY2011-12; it is presumed that most consumers of lead-acid batteries return them to the place of purchase once expired.

6.11.8 Paint

The Rocky Mount Area Habitat for Humanity accepts donations of used paint for reuse. The Nash County Landfill Manager provides information on how to dry paint for proper disposal to individuals throughout the year. The County and several municipalities provide a brochure to citizens on ideas of what to do with left over paint.

- The County does not currently operate a program to collect unused paint.

6.11.9 Florescent Lights

- Nash County collects florescent light bulbs for recycling at the County landfill site and at all nine convenience centers; collected lights are transferred to the County Maintenance Building for pick-up and recycling by *Southeast Recycling Technologies*.
- Rocky Mount: Fluorescent bulbs are collected and staged in the City warehouse for recycling. Rocky Mount also advertises for residents to take fluorescent light bulbs to Lowe's Home Improvement Store for recycling.

6.11.10 Antifreeze

- Antifreeze is accepted for recycling at 1 of 9 convenience sites (landfill site); a dedicated tank for residents to dispose of used antifreeze is available at the site.
- Collected antifreeze is picked up by Safety Kleen of Garner, NC and transported for processing. This occurs once per year.
- Approximately 50-gallons of antifreeze was collected in FY 2011-12.

6.11.11 Motor Oil

- The County collects used motor oil from residential customers only.
- Tanks designated for collection of used motor oil are available at 8 of the 9 convenience center location (exception - Vick site.)
- The City of Rocky Mount collects oil from individual residences; a special scheduled collection is required (maximum of 3 containers per collection.)
- Safety Kleen collects the used oil via vacuum truck and transports it for recycling.
- Approximately 15,191-gallons of used motor oil was collected in FY 2011-12.

6.11.12 Oil Filters

- Used oil filters are accepted at 8 of the 9 convenience site locations (Middlesex, Spring Hope, Strickland, Old Carriage Rd., Drake, County Landfill, Salem, and Aventon). An empty 55-gallon drum is available at the site for collection.
- Safety Kleen currently collects used oil filters for processing and recycling and for processing and recycling. The drum with used filters is collected and transported, a clean drum is left at the site for continued use.
- Approximately 3,550-lbs. of used oil filters were collected for recycling in FY2011-12.
- The City of Rocky Mount collects oil filters from individual residences; a special scheduled collection is required.

6.11.13 Wooden Pallets

- Wooden Pallets are accepted at the 8 of the 9 convenience site locations (Middlesex, Spring Hope, Strickland, Old Carriage Rd., Drake, County Landfill, Salem, and Aventon). A hauler with more than 10 pallets must deliver directly to the landfill convenience site location.
- Collected pallets are used for storage of electronics and miscellany materials by operations staff. Residents are aware of the availability of the pallets and will request pallets if and when needed.
- If a significant number of pallets (surplus) exists for an extended period, a recycler is notified and the pallets are removed for reuse elsewhere.

6.11.14 Cooking oil

- Cooking oil is accepted at each convenience site for recycling.
- Mahoney Environmental of Joliet, Illinois currently collects cooking oil for transporting and recycling
- Approximately 3,318-lbs. of used cooking oil was collected for recycling in FY2011-12

6.11.15 Reusable Clothes, Shoes and Readable Books

- Reusable clothes and shoes are collected at all nine convenience site locations
- Dedicated collection boxes are managed by Mission of Hope
- Over 82,000 pounds of reusable clothes and shoes were collected in FY2011-12.

6.11.16 Plastic Bag Recycling

The Nash County Solid Waste Convenience Centers website page contains a post describing the American Chemistry Council campaign in North Carolina to help the public learn how and where to recycle plastic bags. The campaign features a Recycle Location Finder listing close to 1,200 retail and grocery drop-sites for the bags in North Carolina. Residents are encouraged to participate in this initiative to increase plastic bag recycling in your community.

6.11.17 Recycle Vacuum Cleaners

- Vacuum cleaners are accepted at all 8 of 9 Convenience Centers except, the exception being site 4 (Vicks Center in Nashville) on Hwy 58.
- Vacuum cleaners are collected with electronics and picked up for processing by Creative Recycling

6.11.18 Junk Vehicles

Nash County removes and collects junk and abandoned vehicles at no cost. Vehicles must be located in the unincorporated areas of Nash County. There is an application for the proprietor to complete and submit; a link to the application is available on the County Convenience Center website page. The program is administered by the County Planning Department.

- It is the responsibility of the owner to contact the County Planning Department for participation in the program. A representative of the County then identifies the vehicle by placing a sticker on it.
- The vehicle is picked up and becomes the possession of the towing contractor. The contractor sells the cars for scrap metal and any other useable parts at their discretion according to market conditions.
- Only one vehicle was picked up in 2011

6.12 PREVENTION OF ILLEGAL DISPOSAL AND MANAGEMENT OF LITTER

- The County has a Solid Waste Ordinance for and illegal dumping.

The Nash County Landfill Manager investigates illegal dumping calls and enforces cleanup in the County's jurisdiction. Rocky Mount relies on its Police Department or the Community Code Enforcement Department, as appropriate, to enforce the existing codes. Nashville and Spring Hope rely on their Police Departments for enforcement. The other municipalities contact the County Sheriff for enforcement when they receive complaints.

Several times each year, citizen volunteers participate in the following annual or biannual litter cleanup programs: "Great American Cleanup", "Big Sweep", and "Litter Sweep". These programs are sponsored by Keep America Beautiful and/or the NC Department of Transportation (NCDOT) in an effort to clean up litter along area roads, highways, and waterways. Nash County also has active Adopt-a-Highway volunteer groups who clean two mile stretches of county highways four times each year. Within city/town limits, KAB promotes a similar "Adopt a Spot" program in which volunteers cleanup non-NCDOT maintained streets.

- Tarps are distributed to haulers at the C&D landfill, promoting their use and in order to reduce litter along haul routes to the landfill
- Nash County and The City of Rocky Mount hold Tarp Awareness month to promote the use of tarps; County distributes the “TARP AWARENESS” brochure published by *Keep NC Beautiful*
- KAB sponsors an *Adopt-a-Street* program where persons and businesses can take ownership in preventing litter and manage the cleanup efforts
- KAB’s *Great American Litter* campaign (Annual event / March – May)
- Department of Transportation (DOT) – *Litter-Sweep Event*
- *NC BigSweep* (Annual / Sept-October)

6.12.1 Initiative to Improve Illegal Disposal

- ❑ Initiate discussion with the local towns to identify target areas or concerns
- ❑ Continue to work with law enforcement to emphasize enforcement of illegal dumping laws

6.12.2 Initiative to Improve Management of Litter

- ❑ Initiate discussion with the local towns for the purpose of coordinating efforts

6.13 PURCHASE OF RECYCLED MATERIALS AND PRODUCTS MANUFACTURED WITH RECYCLED MATERIALS

The units of government in Nash County have not adopted buy-recycled policies, although several will buy recycled paper and other products when they are available and the cost is comparable.

7.0 SOLID WASTE MANAGEMENT COST

The solid waste programs of local governments in the County vary. The *County* program serves residents by providing drop-off collection services at convenience centers and disposal at the County construction and demolition landfill. Four local towns contract with private collection companies; and four local governments provide collection services.

7.1 FUNDING SERVICES

The following table provides a summary of funding resources for solid waste programs in Nash County and its local governments:

TABLE 7-1

Town	Tip Fee	General Fund	User Fee	Sale of Recyclables	Tires/White Goods Tax	Other / i.e. Grants
Nash County	⊗(2)		⊗	⊗	⊗	⊗
Bailey		⊗	⊗			
Castalia		(⊗)	⊗			
Dortches (1)		⊗	⊗			
Middlesex			⊗			
Momeyer (1)			⊗			
Nashville			⊗			
Red Oak (1)			⊗			
Rocky Mount	⊗(3)		⊗			
Sharpsburg			⊗			
Spring Hope			⊗			
Whitakers		⊗	⊗			

Notes: (⊗) – only as a contingency
(1) – included in the Nash County Program
(2) – C&D Landfill tipping fee
(3) – Transfer Station tipping fee

7.2 NASH COUNTY SOLID WASTE PROGRAM FUNDING

An Enterprise Fund is used to account for operations that are financed and operated in a manner similar to private business enterprises, where the intent of the governing body is that

the cost (expenses, including depreciation) of providing goods or services to the public be financed or recovered primarily through user charges.

Both the landfill and the convenience centers operate as enterprise funds and receive their income from the annual fees, landfill tipping fees, the white goods tax and scrap tire tax. The C&D landfill tipping fee is $48 per ton including the $2/ton state tax.

7.3 SOLID WASTE MANAGEMENT COST

The County applies an annual fee of $96 per household to the 18,500 landowners in unincorporated areas of the County. The amount of the fee has remained the same since 2005, noteworthy as the number of services provided has increased significantly. The services are also available to residents of incorporated areas for the same annual fee.

The fee covers the operation of the convenience centers and the hauling of solid waste to the landfill (C&D, yard waste) and transfer station (msw). This includes full-time staffing of all nine convenience centers area staffed during operational hours.

The County does not generally receive income from the sale of recyclables; the materials are collected by the hauler in return for a zero haul charge (recyclables) from the convenience centers. There is some income experienced through the sale of used cooking oil, used motor and batteries (nominal).

Occasionally a grant opportunity is available for which it is applied for. Grants received are used for specific uses or programs. Any fiscal year surplus experienced by the solid waste department is accounted for in the landfill and/or convenience centers reserve funds.

The following table provides a summary of the cost analysis for County solid waste services:

Material	Households served (#)	Tons Collected	Collection Cost	Disposal Cost	Total Cost	Calculated Cost Per Ton Managed
Municipal Solid Waste (1)	18,500	11,202	$356,780	$554,499	$891,329	$79
Recycling	18,500	879	$24,800	0	$24,800	$28
Yard Waste	18,500	1,650	0	0	$20,000(2)	$12.12
TOTALS	18,500	13,731	$381,580	$554,499	$956,129	$69.63

- It should be noted that Nash County received approximately 24,000 tons of yard waste resultant of Tropical Storm Irene. Considering this is an *event* project, its volumes and revenues are not included in the table calculations.
- Note (1) – Municipal Solid Waste includes materials collected and sent for eventual disposal in MSW or C&D landfills
- Note (2) – this is an estimate based on previous grinding operations

7.4 THE TOWN OF BAILEY

Bailey contracts with Waste Industries for drop-off collection of MSW and recyclables. The Town applies a fee of $12 per month per container for solid waste collection and $0.50 per month for recycling. It is estimated that 283 households participate in the drop-off recycling program. Bailey has a combined (solid waste and recycling) contract for solid waste collection services in the amount of $44,095.66, estimated per annum. Tonnage information for the Town of Bailey was not available.

7.5 THE TOWN OF CASTALIA

Castalia offers solid waste and recycling collection services through a contractor (WI). Residential solid waste services are coordinated directly with the contractor $15.36 per month/household for solid waste and $3.30 per month/household for recycling, equating to approximately $224 per year. It is estimated that the residents of Castalia pay approximately $29,000 per year for solid waste collection services.

Castalia has a combined (solid waste and recycling) contract for solid waste collection services in the amount of $28,688, estimated per annum; $23,540 for solid waste and $5,148 for recycling. It is estimated that 130 households participate in program. Tonnage information for Castalia was not available.

7.6 TOWN OF MIDDLESEX

The Town of Middlesex provides solid waste collection for its residents. A monthly fee of $13.75 is charged for residential service and a fee of $21.50 is charged for commercial service. Carts for solid waste and recycling are provided. The following provides a cost summary of the Middlesex solid waste program:

Material	Households served (#)	Tons Collected	Collection Cost	Disposal Cost	Total Cost	Calculated Cost Per Ton
MSW	413	273	$38,505	$15,762	$54,267	$198
Recycling	413	92	----	----	----	----
Yard Waste	413	12	----	----	----	----
Totals	413	377	$38,505	$15,762	$54,267	$144

7.7 NASHVILLE

Nashville provides solid waste collection for its residents; collection of recyclables is contracted. An annual fee of $147 is charged for residential waste collection service and a fee of $34.56 is charged for recycling collection service. Recycling Carts for solid waste and recycling are provided. The following provides a cost summary of the Nashville solid waste program:

Material	Households served (#)	Tons Collected	Collection Cost	Disposal Cost	Total Cost	Calculated Cost Per Ton
MSW	2,150	1,664	$86,445	$86,528	$172,973	$104
Recycling	2,380	298	----	----	$93,000	$312
Yard Waste	2,150	250	$40,000	----	$40,000	$160
Totals	----	2,212	$126,445	$86,528	$305,973	$138

7.8 ROCKY MOUNT

The City of Rocky Mount offers collection of residential garbage, recyclables, yard waste, appliances, and bulky waste to residents of Edgecombe County residing within the City limits of Rocky Mount. These materials (with the exception of yard waste) are transported to the transfer station operated by the City at 1221 Thorpe Road. Solid waste delivered to the City of Rocky Mount transfer station is hauled to the East Carolina Regional Landfill in Bertie County, NC, appliances are carried to the Nash County landfill, and yard waste is transported to the City's compost site on Arrow Road. Recyclables are delivered to Sonoco Recycling in Raleigh, NC.

The City provides 4 drop-off sites for recycling in addition to curbside residential collection. The City operates a municipal compost facility for yard waste. Rocky Mount has a population of 57,477 covering two counties, Nash and Edgecombe; with 21,766 households being served with solid waste services. Nash County claims nearly 70% of Rocky Mount's population or 39,953 persons in 15,482 households.

Rocky Mount charges a fee of $9.75 per month per household for MSW collection and $2.25 per month for recycling collection. Tipping fees and the general fund are also used to supplement the funding. Total program cost for residential services provided to Rocky Mount residents in FY2011-12 was $4,859,263. Approximately 30.5% or $1,482,075 of that amount can be assigned to the Edgecombe County side, and approximately $3,377,188 to the Nash County portion of the City.

7.9 TOWN OF SHARPSBURG

Sharpsburg contracts solid waste and recycling collection services. The Town applies a fee of $20 per month/household for solid waste and $8 per month/household for recycling. Sharpsburg has 849 households of which it estimates that 350 homes participate in the recycling program.

Material	Households served (#)	Tons Collected	Collection Cost	Disposal Cost	Total Cost	Calculated Cost Per Ton
MSW	849	----	----	----	$136,950	----
Recycling	350	78	----	----	$39,314	$504.02
Yard Waste	----	1,622	----	----	$3,000	$1.85
Totals	849	----	----	----	$179,264	----

7.10 TOWN OF SPRING HOPE

Spring Hope contracts solid waste and recycling collection services. The Town applies a fee of $20 per month/household for solid waste collection. Spring Hope has 630 households of which it estimates that 297 homes participate in the recycling program. The FY2011-12 budget appropriates $ 184,009 for Sanitation services.

Material	Households served (#)	Tons Collected	Collection Cost	Disposal Cost	Total Cost	Calculated Cost Per Ton
MSW	630	577	----	----	$111,000	$192
Recycling	----	44	----	----	$8,000	$181
Yard Waste	----	187	----	----	$35,000	$187
Totals	630	808	----	----	$154,000	$190

7.11 TOWN OF WHITAKERS

Whitakers contracts solid waste collection and recycling services. The Town applies a fee of $19 per month per household for solid waste and recycling collection services. Whitakers has 360 households of which 337 participate in the program.

Material	Households served (#)	Tons Collected	Collection Cost	Disposal Cost	Total Cost	Calculated Cost Per Ton
MSW	337	335	$24,939	$18,449	$43,388	$129.00
Recycling	337	32	$1,300	$11,798	$13,098	$414.00
Yard Waste	----	----	$25,379	----	$25,379	----
Totals	----	367	$51,618	$30,247	$81,865	$223.06

7.12 SUMMARY OF SOLID WASTE PROGRAM COSTS

The following table provides a summary of the costs to manage solid waste by Nash County and its local towns. The cost per household is calculated by dividing the total cost of services by the number of households.

TABLE 7-1

SUMMARY OF SOLID WASTE PROGRAM COSTS						
Local Government	Solid Waste Collection	Solid Waste Disposal	Reduction, Reuse and Recycling	Mulching	Total Cost	Cost per Household
Bailey	----	----	----	----	$44,096	$155.82
Castalia	----	----	----	----	$28,688	$220.68
Middlesex	$38,505	$15,762	----	----	$54,267	$128.56
Nashville	$86,445	$86,528	$93,000	$40,000	$305,973	$136.29
Rocky Mount (1)	----	----	----	----	$3,377,188	$218.14
Sharpsburg	$136,950	----	$39,314	$3,000	$179,264	$211.15
Spring Hope	$111,000	----	$8,000	$35,000	$154,000	$244.44
Whitakers	$24,939	$18,449	$13,098	$25,379	$81,865	$242.92
Nash County (2)	$356,780	$554,499	$24,800	$20,000	$956,129	$51.68
TOTALS					$5,181,470	$132.84

Notes: (1) – Nash County proportion
(2) – includes households in Dortches, Momeyer and Red Oak

8.0 EMERGENCY/DISASTER DEBRIS MANAGEMENT AND ANIMAL MORTALITY

8.1 EMERGENCY / DISASTER DEBRIS MANAGEMENT

Each unit of government coordinates disaster response activities with the appropriate county, state and federal agencies. Locations in the County for the staging of yard waste and demolition debris have been identified. Nash County also has an approved Emergency Management Plan that addresses comprehensive disaster issues for multi-hazards. The Health Department's Solid Waste Program has general procedures and protocols in the event in the event of a disaster.

A copy of the County Emergency Management Plan is provided in Appendix E.

8.1.1 Anticipated Wastes Generated in Volumes More than Typical

- Yard waste debris (trees and tree limbs, stumps, miscellaneous brush)
- Construction and demolition waste
- Household hazardous wastes (HHW)
- Accumulated msw in the event of a disruption to collection activities

8.1.2 Considerations to Improve Emergency Preparedness

- ❑ Bi-Annual HHW collection program (fall and spring) to collect HHW prior to winter and spring to reduce the volumes of exposure
- ❑ Work with public works departments and utility providers to coordinate electric line and easement clearing to reduce potential for electricity outage and subsequent cleanup effort and volume of material for management post disaster event
- ❑ Incorporate emergency preparedness as a topic for discussion in Educational forums
- ❑ Hold an annual meeting to review the Emergency Operations Plan with local County heads of pertinent departments (solid waste, cooperative extension, etc., town and city government leaders, NCDOT, electrical providers.
- ❑ Update the plan annually and upon any change in its contents including conditions, entity, contact, etc.

8.1.3 Designated Debris Staging Areas

Two staging areas for storm disaster debris are identified in the County:

- The primary staging area for debris resultant of a destructive disaster is the Nash County C&D Landfill. This is a central location and is most likely the disposal site for the C&D and LCID type waste debris resultant from such an event.
- Rocky Mount composting site
- The City of Rocky Mount also has a permitted but inactive temporary staging site located on Duke Circle

As a contingency, a list of designated locations in neighboring counties is maintained; furthermore, as a contingency for waste collections and disposal, the County maintains a list of disposal sites for direct haul, i.e. direct haul to ECRLF bypassing the transfer station, if necessary. The establishment of a temporary transfer station may be necessary to consider.

8.1.4 Emergency Contact List

A contact list to be used in the event of an emergency or natural disaster causing destruction is developed and included in the County's Emergency Management Plan. Generally, the flow of contact follows from the county manager to the respective local governments and their emergency plan coordinators. For the purpose of disaster debris management, the following persons shall be contacted:

- Matthew Richardson – Solid Waste Director (252) 459-9899; mobile (252) 904-3396
- William W. Hill, Jr. – Nash County Health Director (252) 459-9823
- Ben Barnes – DENR Regional Waste Management Specialist (252) 459-4502; mobile (919) 621-3680
- Garrett & Moore, Consulting Engineers – (919) 792-1901; mobile (919) 218-0111

8.2 MASS ANIMAL MORTALITY PROGRAMS

8.2.1 Bird Carcass Disposal

Braswell Milling Company and Perdue Farms are the major commercial poultry processers in the County. These two companies are knowledgeable and have a staff experienced with the issues relating to bird disease and disposal of bird carcasses. Both companies have developed *"Emergency Preparedness, Response and Management"* plans that include lists of disposal facilities and methods in the event of a disaster or disease causing mass animal mortality.

Nash County has deferred to these companies to initiate their plans, methods for disposal of bird carcasses in the event of a natural disaster or disease outbreak resulting in significant bird deaths. Experience has shown that proposed disposal methods can become impractical or unavailable in the event of a natural disaster (depending on the type of disaster), it is important that several options be available for potential use in Nash County. The following is a list of the options for managing and disposal methods (not necessarily in order of preference) that would be available for use in the event of a bird disease outbreak that results in a significant numbers of fatalities:

- In-house composting and land application,
- Contracted composting and land application,
- Transportation to an out of county renderer,
- Direct haul and burial at an approved landfill,
- Burial on-site, and or Incineration

Any use of these methods requires that any and all state and/or federal permits and requirements be compiled with.

9.0 RESOLUTIONS

Section 9 is for insertion of signed copies of resolutions from all participating entities (local governments, solid waste authorities) showing adoption of the plan.

NASH COUNTY
RESOLUTION TO APPROVE
A THREE-YEAR UPDATE TO THE
NASH COUNTY 10-YEAR SOLID WASTE MANAGEMENT PLAN

WHEREAS, it is a priority of this community to protect human health and the environment through safe and effective management of municipal solid waste;

WHEREAS, the reduction of the amount and toxicity of the local waste stream is a goal of this community;

WHEREAS, equitable and efficient delivery of solid waste management services is an essential characteristic of the local solid waste management system;

WHEREAS, it is a goal of the community to maintain and improve its physical appearance and to reduce the adverse effects of illegal disposal and littering;

WHEREAS, Nash County recognizes its role in the encouragement of recycling markets by purchasing recycled products;

WHEREAS, involvement and education of the citizenry is critical to the establishment of an effective local solid waste program;

WHEREAS, the State of North Carolina has placed planning responsibility on local government for the management of solid waste;

WHEREAS, NC General Statute 130A-309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to update the Ten Year Comprehensive Solid Waste Management Plan at least every three years;

WHEREAS, the Nash County Health Department, Garrett & Moore, Inc., and Solid Waste Management Plan Update Committee have undertaken and completed a long-range planning effort to evaluate the appropriate technologies and strategies available to manage solid waste effectively;

NOW, THEREFORE, BE IT RESOLVED that Nash County hereby approves the three year update to the Nash County 10-year Solid Waste Management Plan.

Adopted by the Board of Commissioners during regular session on this 3rd day of December 2012.

Fred Belfield Jr.
Chairman
Nash County Board of Commissioners

ATTEST:

Janice Evans
Janice Evans, Clerk

10.0 ORDINANCES

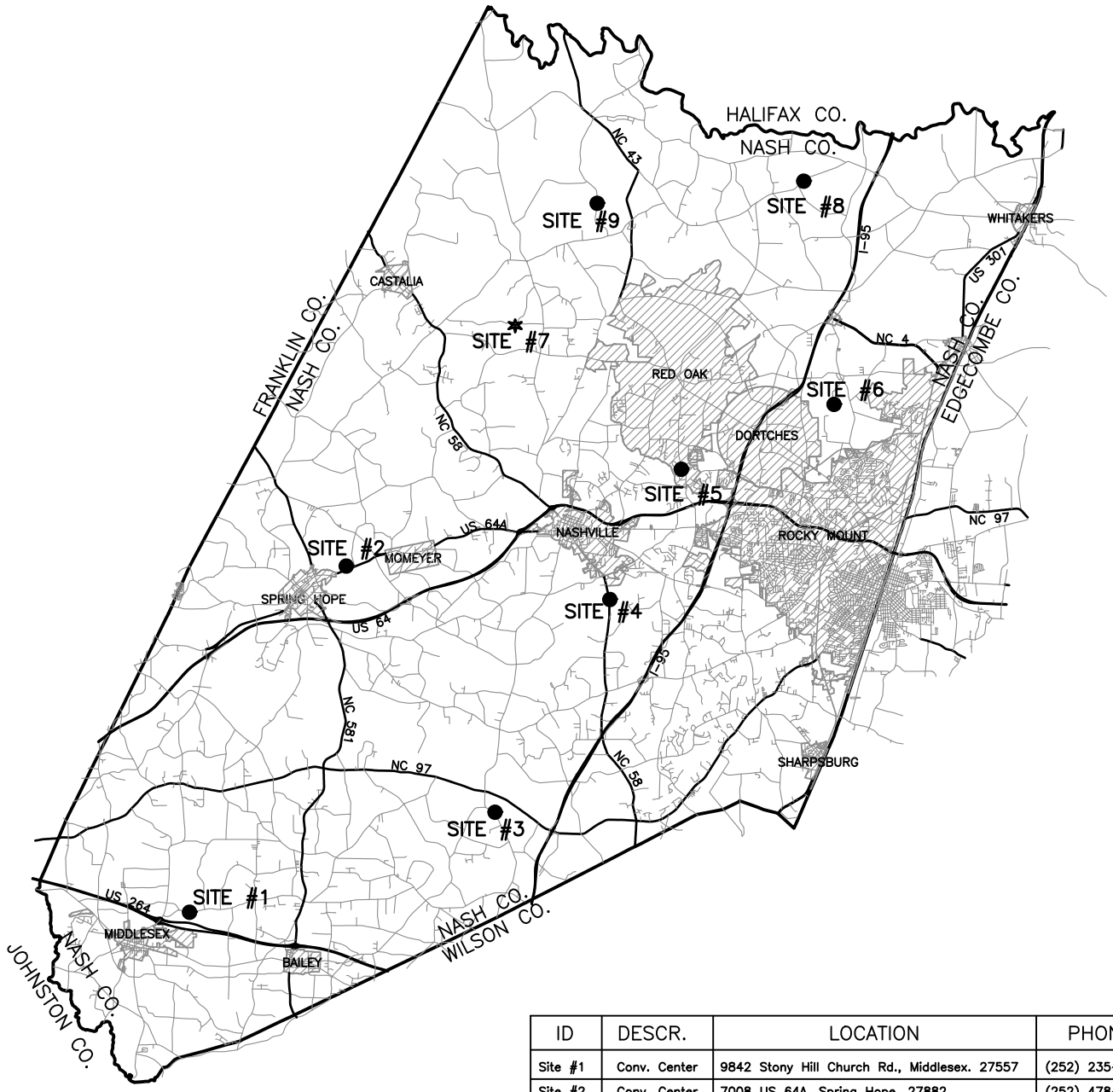
The following is a web link to Chapter 20 of the Nash County Code of Ordinances addressing Solid Waste Management:

http://www.co.nash.nc.us/Ordinances/OrdFrame.htm

11.0 SUBMITTAL

When complete, the plan shall be placed on the County website in a conspicuous location available for public viewing. A link to the completed plan shall be sent by e-mail to the Solid Waste Section – Programs and Planning Branch.

APPENDIX A



ID	DESCR.	LOCATION	PHONE
Site #1	Conv. Center	9842 Stony Hill Church Rd., Middlesex. 27557	(252) 235-2658
Site #2	Conv. Center	7008 US 64A, Spring Hope. 27882 Hwy 64 Alternate, just east of Spring Hope	(252) 478-4076
Site #3	Conv. Center	9881 Old Bailey Hwy, Wilson. 27896 State Road 1001, Old Bailey Hwy 1 mile south of Hwy 97 (near Wilson)	(252) 399-7682
Site #4	Conv. Center	3081 South Hwy 58, Nashville. 27856 Hwy 58, 2 miles south of Nashville	(252) 459-4798
Site #5	Conv. Center	2018 N. Old Carriage Rd., Rocky Mount. 27804 N. Old Carriage Road, north of Hwy 64	(252) 443-9036
Site #6	Conv. Center	4782 Drake Rd., Battleboro. 27809 Drake Road/State Road 1526 off Hwy 48, North of Rocky Mount	(252) 977-2158
Site #7 Landfill	Conv. Center/ C&D Landfill	3057 Duke Rd., Nashville. 27856 Duke Road, State Road 1411 (at old landfill site)	(252) 459-5750
Site #8	Conv. Center	6271 Swift Creek School Rd., Whitakers. 27891 Swift Creek School Road, State Road 1500 between Salem and Hickory	(252) 443-1460
Site #9	Conv. Center	10801 Cooper Rd., Nashville. 27856 Cooper road, State Road 1403 South of Aventon	(252) 937-7298

-N-

GRAPHIC SCALE 1"=5 MI.

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GARRETT & MOORE
Engineering for the Power and Waste Industries

NASH COUNTY SOLID WASTE FACILITIES

JOB

FIG
1

APPENDIX B

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

Local Government Name: Nash 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: 35 %

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 2021-22**
1. Baseline year per capita disposal rate *(FY 1991-1992 unless alternate approved by Section)*	1.09
2. Percent waste reduction goal	35 %
3. Targeted per capita disposal rate (Subtract line 2 from 1.0 and multiply result by line 1)	0.7085
4. Estimated population in the new waste reduction goal year (Available at Office of State Budget and Management website: Projected Annual County Population Totals 2010-2019)	100,308
5. Projected tonnage for disposal at baseline disposal rate (Multiply line 1 by line 4)	109,336
6. Targeted annual tonnage for disposal (Multiply line 3 by line 4)	71,068
7. Targeted annual tonnage to reduce (Subtract line 6 from line 5)	38,268

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:

For example: ___ tons by increasing recycling
___ tons by source reduction
___ tons by utilizing composting
___ tons by _____ (specify means)

APPENDIX C

1.0 Introduction

N.C. General Statutes 130A-309.130 through 130A-309.141 *"Discarded Computer Equipment and Television Management*" establishes an electronics recycling program for the State of North Carolina with shared responsibility between computer manufacturers, television manufacturers, retailers, local and state government, and consumers with the general goal of fostering a statewide recycling infrastructure for these materials. In conjunction with this program, the law bans televisions, computers, monitors, printers, scanners, and computer peripherals such as keyboards and mice from disposal in landfills.

1.1 North Carolina Electronics Management Program

The North Carolina Electronics Management Program distributes money to eligible local governments annually in February. In order to be able to qualify for the Electronics Management Fund distributions, a county must have amended their comprehensive solid waste management plan to include all of the required electronics management components that are listed in the law. An additional provision becomes effective January 1, 2013, that requires that the local government must contract with a recycler that holds either the R2 or e-Stewards certifications.

2.0 Nash County – Background

Nash County began collecting electronics for recycling in July 2008. The Solid Waste Program introduced an Amendment to the Solid Waste Plan in October 2010.

3.0 Electronics Recycling Program

Nash County operates a Drop-off Recycling Program for the collection of electronics.

3.1 Collection Practices

Nash County collects electronics for recycling all 9 convenience center locations in the county.

Collected electronics are stored at the convenience center sites on used pallets or in heavy duty cardboard covered bins. The county contracts electronics recycling with a private *r2certified* recycler. The recycler visits the collection sites, secures the electronics on pallets with shrink wrap and transports for recycling. The ‘pick-ups’ are scheduled on a pre-arranged specified day. If volumes are such that storage capacity is limited, a special collection may be arranged.

3.2 Electronics

Nash County provides collection of the following electronics:

- ❑ Computers, televisions, monitors, printers, VCR's, DVD players, small peripherals (keyboards, mice, etc.), scanners, printers, copiers, stereos, video/audio equipment, network cabling equipment, test equipment, cell phones, telephones, phone equipment

- ❑ Additionally, vacuum cleaners are collected and recycled with electronics

3.3 Special Instructions

The Solid Waste Department advises residents to not cut power cords or plugs; to not remove back panels where applicable or otherwise modify units prior to drop-off.

4.0 Public Awareness

The solid waste department informs the public about the electronics recycling program through the county website, convenience center brochures, posted at convenience center locations, newspaper advertisements and through presentations by department staff to schools and civic organizations, as well as landfill and convenience center tours.

Additionally, Keep America Beautiful (KAB) provides assistance in educating and informing the public about electronics recycling and the programs available in Nash County.

The following is a link to the Convenience Center website page:

http://www.co.nash.nc.us/Departments/HealthDepartment/SolidWasteProgram/SolidWasteConvenienceCenters.aspx

5.0 Recordkeeping

Collected electronics are transported to the Recycler's processing location. Electronics are segregated and accounted for by type. The Recycler provides the County a record of the unit type(s), quantity and weights. In accordance with the State program, televisions are tracked separately.

The volumes of electronics are tracked and totaled for NCDENR Annual Solid Waste Reporting.

6.0 Interactions with Other Local Governments

In addition to providing solid waste drop-off services to residents of unincorporated areas of the county, convenience centers and the Electronics Recycling Program is available to the residents of Dortches, Momeyer, and Red Oak. The City of Rocky Mount provides electronic recycling opportunities directly with its residents.

It is the intent of the Solid Waste Department to increase its outreach efforts to local towns in the county for the purpose of coordinating efforts to advance recycling countywide.

7.0 Accounting

A separate fund for the receipt and expenditure of funds from the State's Electronics Management Program is established. Expenditure of State funds will be used only to support the electronics recycling program.

Copy of Recyclers’ R2 Certifications

Certificate US10/55609

The management system of

Creative Recycling Systems, Inc.

8108 Krauss Blvd.,
Tampa, Florida, 33619, U.S.A.

has been audited 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 1 March 2010 until 28 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

Zachary C. Pivarnik
Accreditation Manager, North America

SGS Systems & Services Certification
Division of SGS U.S. Testing Company Inc.
201 Route 17 North Rutherford, NJ 07070 USA
t 201-508-3000 f 201-935-4555 www.us.sgs.com

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

graphic design atelier roger pfund printed by orell füssli security printing ltd switzerland

Certificate of Compliance CA10/55606

CERTIFICATE OF COMPLIANCE

This is to notify that the Occupational Health and Safety System of:

Creative Recycling Systems, Inc.

8108 Krauss Blvd.,
Tampa, Florida, 33619, U.S.A.

has been assessed and found to be in compliance with the requirements of:

OHSAS 18001:2007

The assessment covered the following scope:

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.

This certificate is valid from 1 March 2010 until 28 February 2013 and and remains valid subject to satisfactory surveillance audits.
Recertification audit due 28 January 2013
Issue 1.

Signed for and on behalf of SGS Systems & Services Certification Canada Inc

Zachary C. Pivarnik
Accreditation Manager, North America

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Certifying Office
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SGS OHSAS 01 0303

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Certificate CA/55608

The management system of

Creative Recycling Systems, Inc.

8108 Krauss Blvd.,
Tampa, Florida, 33619, U.S.A.

has been assessed and certified as meeting the requirements of:

ISO 14001:2004

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 ISO 14001:2004 requirements may be obtained by consulting the organization.

This certificate is valid from 1 March 2010 until 28 February 2013 and remains valid subject to satisfactory surveillance audits.
Re certification audit due before 28 February 2013
Issue 1.

Signed for and on behalf of SGS US Testing Company Inc

Zachary C. Pivarnik
Accreditation Manager, North America

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APPENDIX D

~~Appendix H~~

Abandoned Manufactured Home Planning Initiative

Section I. Project Objective

The Abandoned Manufactured Home Planning Initiative (AMHPI) is designed to act as a management program for the reduction and proper disposal of abandoned manufactured homes. The goal of the program is to reduce the number of properties that pose a threat to the public safety and general welfare of the citizens of Nash County. Through proper demolition, removal and recycling of abandoned manufactured homes, citizens enjoy the benefits of protected property values, increased safety, and environmentally friendly communities. Measures are taken to ensure that all demolition debris is properly disposed of or recycled. Acceptance into the program is based on a first come, first served basis and upon a site inspection performed by the Nash County Planning Department. Individual property owners are limited to applying for no more than two (2) units in a year. If; however, at the fourth quarter, (1) funds are available and (2) no other applications have been submitted; then a property owner may apply for additional units.

The program offers financial support to remove the units from properties located throughout the unincorporated areas of Nash County and outside of any municipal ETJ.

Nash County intends to initiate the Abandoned Manufactured Home Planning Initiative Program in the Fiscal Year 2009-2010 to assist property owners in the removal of abandoned manufactured homes.

Section II. Definitions

<u>Abandoned Manufactured Home</u> Any structure which is a health or safety hazard as a result of the attraction of insects of rodents, conditions creating a fire hazard, dangerous conditions constituting a threat to children, or frequent use by vagrants as living quarters in the absence of sanitary facilities, and which cannot be repaired, altered, or improved so as to no longer constitute such health and safety hazard at a cost of less than fifty (50) percent of its value, as determined by the Code Enforcement Official.

Demolition Contractor

A company or individual that performs the service of deconstruction, removal, and/or recycling of a structure or scrap debris.

Manufactured Home

A manufactured home is a home that (a) consists of a single unit completely assembled at the factory or of two (double-wide) or three (triple-wide) principal components totally assembled at the factory and joined together at the site; and (b) is designed so that the total structure (or in the case of a double-wide or triple-wide, each component thereof) can be transported on its own chassis; and (c) is over thirty two (32) feet long and over eight (8) feet wide; and (d) is used or is held ready to use, as a dwelling or has been converted to a storage building.

Scope of Services Agreement

A written contract the Demolition Contractor operates under for the deconstruction and removal of abandoned manufactured homes. Said contract specifies the process of the proper demolition and removal of an abandoned manufactured home. Guidelines, requirements, and standard operating procedures are specified within this contract.

Section III. Identification Process

Voluntary Inspection

A representative from Nash County Planning Department, upon receipt of a completed application shall inspect properties at the request of the property owner(s) for the purpose of applying for assistance to voluntarily remove an abandoned manufactured home.

Inspection Criteria

A manufactured home shall be deemed abandoned if it meets the definition provided in Section II.

Demolition Process

Nash County Solid Waste shall ensure the proper demolition, removal, and recycling of the units. Contractors shall bid on the deconstruction of abandoned manufactured homes and shall be approved based on cost and their ability to perform appropriate and approved deconstruction methods. Approved demolition contractors must have the ability to deconstruct the

abandoned manufactured home on-site. All hazardous materials shall be removed from the structure prior to deconstruction. Any such materials must be properly removed from the demolition site and transported to a center licensed to receive such materials.

Approved demolition contractors shall operate under a Scope of Services Agreement. The following guidelines are set forth to serve as standard operating procedures for the demolition and recycling of abandoned manufactured homes. Contractors must agree to the terms and procedures specified within the agreement prior to performance of any services being assigned.

Notification

Nash County Planning Department shall notify contractors in order to obtain bids for the demolition, removal, and recycling of abandoned manufactured homes. Contractors may be notified via electronic mail or fax for a request to submit bids. Contractors will be notified of the property location, ownership, and contact information and may contact the property owner(s) in order to obtain information necessary to submit a bid for the demolition, removal, and recycling of the manufactured home. Nash County Planning Department will accept bids by authorized contractors that are received via electronic mail or fax. The contractor awarded the project will be notified via telephone by an authorized agent of Nash County Planning Department.

Site Survey

Once the contractor is awarded the bid, the contractor shall notify the property owner(s) prior to the demolition, removal, and recycling of the abandoned manufactured home. A site survey must be conducted with the property owner(s) present to identify any utility connections including marking the placement of a septic tank and/or septic field and well. The property owner(s) is responsible for ensuring that all utility connections are disconnected and notifying the contractor when such measures have been taken. The contractor must be notified by the property owner(s) of any possible hazards. The contractor may not access the property through an adjoining property without proper consent from that property owner.

Deconstruction

The following shall apply to abandoned manufactured homes whether completely intact or partially deconstructed. The contractor shall attempt to remove any recyclable materials from the abandoned manufactured home prior to demolition. Recyclable materials may include but are not limited to: metal, glass, wood, plastics, and thermostats containing mercury switches or any other material that is required by the State of North Carolina to be recycled. The contractor shall deconstruct the home in a manner to minimize airborne debris. The demolition debris shall be contained on-site in a manner that would not cause any adverse effects to adjoining properties. All materials must be delivered to the Nash County Landfill for disposal and recycling. The deconstruction process shall be carried out in a manner as to cause the least amount of disturbance or damage to the subject property.

Removal

All demolition debris shall be removed from the site on a vehicle capable of safely transporting materials from the demolition site to the Nash County Landfill. During transportation, all debris must remain covered with a tarp or fabric and shall be properly secured, so as not to allow any debris to fall from the vehicle. All debris from any of the deconstructed components must be removed from the property.

Lot Condition

The demolition contractors are required to level, compact, or fill any portion of the property that is affected by the deconstruction and removal of debris. The contractor shall take all measures possible to minimize any unnecessary disturbance of soil or vegetation on the property. The contractor is required to remove and replace any contaminated soil that results from the spillage of any fluids or hazardous materials from equipment associated with performing the demolition or removal of debris. Well and septic tanks that are abandoned on the site shall be properly closed.

Final Inspection

Upon request of the contractor for a final inspection, a representative from Nash County Solid Waste shall visit the site to insure that all debris is removed and other specifications of the specific contract have been met.

Liability

The demolition contractor shall provide and maintain a level of insurance set by Nash County that will cover any damage or injuries that may occur to property or persons while performing the service of demolition and removal of the abandoned manufactured home. The contractor is responsible for any damage that may occur to the property that is outside the specified area of demolition. The contractor and any of the contractor's employees, act as agents of the company and not as an agent of the County. The County shall not be held liable for any actions or damage that may occur as a result of the demolition and removal of an abandoned manufactured home.

APPENDIX E

NASH COUNTY, NC
WATER DISTRIBUTION SYSTEM
EMERGENCY MANAGEMENT PLAN

1.0 INTRODUCTION

The purpose of this Emergency Management Plan is to provide information to Nash County water distribution system personnel regarding emergency response. This plan has been developed pursuant to rule 15A NCAC 18C .0307(e) of the North Carolina Rules Governing Public Water Systems. It includes the following information:

2.0 Personnel Responsible for Emergency Management…….Page 1
3.0 Identification of Foreseeable Emergencies…….....Page 3
4.0 Description of Emergency Response for Each Identified Emergency……..Page 3
5.0 Notification Procedures……...Page 6
6.0 Evaluation of Primary System Components……Page 7
7.0 Regular Updates to the Plan……...Page 8

This document should be accessible to all personnel responsible for emergency management and to the operator on duty at all times. In addition this document shall be made available to the North Carolina Public Water Supply (NCPWS) upon request. In the event that the information below should change or become dated, i.e. contact names and numbers, this emergency plan should be updated immediately.

2.0 PERSONNEL RESPONSIBLE FOR EMERGENCY MANAGEMENT

System Emergency Contacts:

1) Utilities Coordinator, Public Utilities Department – Scott Farmer
   (252) 904-2798 (cell) (252) 985-9257 (pager) (252) 937-4581 (home)

2) Director of Development, Public Utilities Department – Patsy King
   (252) 904-2180 (cell) (252) 462-2434 (office)

3) County Manager – Robert Murphy
   (252) 459-9800 (office)

4) Engineering Consultant – Luke Kwong, The Wooten Company
   (919) 828-0531 (office) (919) 418-6888 (cell)

Local, State, and Federal Emergency Contacts:

5) Local Emergency Assistance:
   - Law Enforcement (911)
   - Fire Department (911)
   - Emergency Medical Services (911)
   - Nash County Health/Environmental Health Department and Lab (911)

6) Nash County Emergency Management Officer - Brian Brantley
(252) 459-9805 (office) (252) 407-0054 (pager) (252) 459-7131 (home)

7) NC Public Water Supply - Raleigh Regional Office:
During business hours - (919) 571-4700.
After hours -
- Contact I - Michael Douglas (800) 412-1865 (pager)
- Contact II - (Surface Water) – Bobby Whisnant (800) 412-1584 (pager)
- Contact II - (Ground Water) – Ed Sasser (800) 412-1971 (pager)

8) Federal Contact - Environmental Protection Agency, Region 4, Water Management Division, 24-Hour Spill Reporting - (404) 562-8700

9) FBI Contact (Charlotte office serves as dispatcher) - (704) 377-9200

10) Private Contacts
- Critical or priority customers:

  Universal Leaf North America:
  - (252) 459-8315
  - (252) 243-1626 (Ray Eason, Plant Manager, home)
- Contract laboratories:

  Environment I Testing, Greenville, NC:
  - Business hours - (252) 756-6208
  - After hours - (252) 756-3119 (John Melvin, home)
- Contract environmental responders:

  Ed Braswell & Sons:
  - Business hours - (252) 937-9877
  - After hours - (252) 985-8029

11) Public Information
- Establish single point of media contact
- Emergency notification and directives
  - Radio announcements
  - Door hangers
  - Television
  - Local papers

3.0 IDENTIFICATION OF FORESEEABLE EMERGENCIES

An emergency includes any event that may degrade the quality or quantity of a potable water supply system. Water supply systems in eastern North Carolina can be faced with a multitude of situations, either natural or human-caused, that may result in an emergency. The following is a list of foreseeable emergencies that Nash County and its water distribution system could experience.

Natural-Disaster Hazards

- Hurricane
- Tornado
- Flood
- Earthquake
- Forest or Brush Fires and Firestorms
- Other Severe Weather: Lightning, Extreme Heat, Heavy Snow or Ice Storms
- Waterborne Disease

Human-Caused Disaster Hazards

- Hazardous-Material Release: Chlorine Spill, Source Water Contamination
- Fire: Water Treatment Facility Structure Fire, Community Fire
- Construction or Transportation Accidents: Power Outage, Water Main Break
- Vandalism: Facility or Equipment Damage
- Hazardous event resulting from an act of sabotage or terrorism

4.0 DESCRIPTION OF EMERGENCY RESPONSE FOR EACH IDENTIFIED EMERGENCY

Most natural and human-caused disasters often come with little or no warning. In these situations, prompt notification is the first course of action, followed by implementing actions to contain or isolate the situation. If adequate warning is given prior to a disaster hazard, actions should be implemented to mitigate the effects of such a disaster. The following addresses emergency response for each identified emergency listed above:

Natural-Disaster Hazards

- Hurricane

  In the event that sufficient prior warning is allowed, the following planned actions should be implemented.
  - Initiate notification procedures, Section 5.0
  - Institute a water conservation warning
  - Review inventory of emergency equipment and supplies
  - Stock utility trucks with service and repair supplies
  - Ensure all communication equipment is charged and operational

- Identify and valve off exposed pipes at stream and drainage crossings where possible
- Fuel all service vehicles
- Make arrangements for food delivery to work crews
- Notify media of emergency operations and locations
- Allow emergency work crew to address personal business
- Set up work schedules and crews
- Move all vital records to the emergency operations post
- Contact contractors, parts shop, and mechanics if necessary

- Tornado

  Tornados are difficult to predict and often occur with little or no warning; thus action planning is difficult. However, mitigation actions can be taken prior to the threat of tornado season to decrease the vulnerability of the system, such as reinforcing existing structures.

  - Initiate notification procedures, Section 5.0

- Flood

  Flooding is often a result of heavy rains from hurricanes or severe thunderstorms; thus action planning is identical to that of hurricanes.

  - Initiate notification procedures, Section 5.0
  - Institute a water conservation warning
  - Review inventory of emergency equipment and supplies
  - Stock utility trucks with service and repair supplies
  - Ensure all communication equipment is charged and operational
  - Identify and valve off exposed pipes at stream and drainage crossings where possible
  - Fuel all service vehicles
  - Make arrangements for food delivery to work crews
  - Notify media of emergency operations and locations
  - Allow emergency work crew to address personal business
  - Set up work schedules and crews
  - Move all vital records to the emergency operations post
  - Contact contractors, parts shop, and mechanics if necessary

- Earthquake

  Earthquakes, like tornados, are difficult to predict and often occur with little or no warning; thus action planning is difficult.

  - Initiate notification procedures, Section 5.0

- Forest or Brush Fires, and Firestorms

  Forest or brush fires and firestorms are more likely a threat during dry weather or drought conditions. Forest or brush fires can damage watersheds, system structures, and create water shortages due to fire fighting. Firestorms in urban areas may also create water shortages or outages as a result of fire fighting.

  - Initiate notification procedures, Section 5.0

- Other Severe Weather: Lightning, Extreme Heat, Heavy Snow or Ice Storms
  Severe weather may create a multitude of hazards including power outages, equipment damage, and water shortages.
  - Initiate notification procedures, Section 5.0

- Waterborne Disease
  - Initiate notification procedures, Section 5.0
  - Institute a boil water notice for all water system customers until threat has passed; distribute a notice on door hangers or in person door-to-door, and use the local radio station and local TV news to broadcast it

Human-Caused Disaster Hazards

Monitor source water quality to identify when to shut down source water and when to start system back up

- Fire: Water Treatment Facility Structure Fire, Community Fire
  - Community Fire (Notification of a large community fire would be made to the water supply system by the Fire Department.)
    - Initiate notification procedures, Section 5.0
    - If necessary contact Rocky Mount to request they turn on pumps to increase pressure at hydrants

- Construction or Transportation Accidents: Power Outage, Water Main Break
  - Water Main Break
    - Initiate notification procedures, Section 5.0
    - Valve-off affected water lines
    - Consider alternate routes to supply water until line is repaired

- Vandalism: Facility or Equipment Damage
  It is mandatory to institute security measures, if not already in place, including fencing and locks where necessary.
  - Initiate notification procedures, Section 5.0
  - After repairs have been performed and system is operating at normal levels, security measures should be analyzed and increased where necessary.

- Acts of Sabotage (includes Terrorism)
  - Conduct preliminary event assessment and threat assessment: nature, extent, severity (impacts to human health or other critical infrastructure [e.g., fire protection])
  - Define emergency status as:
    ***Normal operations/minor emergency*:** Required response does not extend beyond utility; "emergency response" not required.
    Alert condition: A major emergency may be forthcoming. Assessment is ongoing.

Emergency condition: Disruption imminent or in progress; all emergency resources of utility (and possibly outside responders) brought to bear. Emergency response plan implemented.

***State of Emergency*:** Large-scale, possibly community-wide disruptive event; usually issued by state governor. All private and public resources allotted to emergency.

- Call 911 if police assistance is needed.
- Initiate notification procedures, Section 5.0.
- Contact the FBI (see Section 2.0) if circumstances seem suspicious or need to be further investigated.
- In the case of suspected terrorism or other activity about which other water systems should be warned, post information to the EPA-recommended WaterISAC (Water Information Sharing and Analysis Center) phone line and website. The EPA suggests that all public water suppliers periodically check the website or subscribe to the listserve to stay informed regarding potential threats and to share advice in managing problems related to water system protection.
    - (703) 926-7753 Emergency phone to share information with other systems
    - Website address: http://www.waterisac.org

5.0 NOTIFICATION PROCEDURES

In the event of an emergency there are certain procedures that should be followed by all water system personnel to ensure that the situation is handled appropriately and with as little risk to public safety as possible. The following is the notification procedure adopted by Nash County:

1) First priority is to personal safety.

2) Phone the first emergency contact listed above, Section 2.0 "Personnel Responsible for Emergency Management." If unavailable, phone next person on the list until proper notification has occurred.

3) Try to contain or isolate the situation.

4) Analyze type and severity of emergency prior to taking corrective actions.

5) Implement Countermeasures and Recovery Plan.

    - Continue to provide non-potable water for critical needs.
    - Isolate affected portion of system.
    - Provide emergency water supplies.
        - Tank truck
        - Interconnection with another utility
        - Bottled water

6) Notify any residents or customers that may be affected as a result of this situation. Depending on the area affected, door-to-door notification, radio, television, and newspapers can all be used as a source of providing information quickly and effectively to the public.

7) Once the problem is resolved, use the same notification procedures as outlined in step 6) above to inform the public that the situation has passed and they can resume normal water use procedures.

6.0 EVALUATION OF PRIMARY SYSTEM COMPONENTS

There are certain key components of a water system that keep it operational. This equipment helps ensure that the quality and quantity of potable water being supplied to its customers is satisfactory. The Nash County system currently consists of distribution piping connecting a portion of the county just west of Rocky Mount to the Rocky Mount system. The following is an overview of the Nash County water distribution system.

Identification and Evaluation

Nash County currently operates a 0.033 mgd (1 million gallons per month) distribution system serving about 422 residential connections in Area 1 (west of Rocky Mount). The distribution system components include the following.

- There are currently two regular (daily use) connections to the City of Rocky Mount water distribution system to serve Area 1:
  (1) at the intersection of US Highway 301 Bypass and NC Highway 97; and,
  (2) at the intersection of South Halifax Road (State Road 1544) and the Tar River.

  Both receive water via gravity, not pumps.

- There are currently no water booster pumps, no water treatment stations, no power sources, and no storage tanks.
  (However, Nash County will own and operate a new elevated water storage tank in the near future at a site that will serve a different portion of the county (north of Nashville).

- There are currently water mains, totaling approximately 11.5 miles, which convey finished water to Area 1. In the event of a water main break, the distribution system has adequate in-system valves and a pipe grid to isolate and repair the break. These valves are exercised periodically to ensure operability during an emergency situation.

- There is currently no automated monitoring system installed in the distribution system.

7.0 REGULAR UPDATES TO THE PLAN

- This plan should be updated after completion of a vulnerability assessment.
- This plan should be updated periodically to keep phone numbers and system specific information current.

_____ _____

J. Claude Mayo, Jr. Chairman May 12, 2003
Nash County