STATE OF	SOUT	TH CAROLINA	)	
			)	ORDINANCE # 802
COUNTY	OF	MARLBORO	)	

AN ORDINANCE ADOPTING, REVISING, AMENDING, RESTATING, CODIFYING, AND COMPILING THE MARLBORO COUNTY SOLID WASTE MANAGEMENT PLAN

WHEREAS, the Acts of the Legislature of the State of South Carolina empower and authorize the political subdivision to revise, amend, restate, codify, and compile any existing ordinances as from time to time may be required; and,

**WHEREAS**, the present solid waste management plan was adopted on March 31, 1994, was substantially rewritten and amended on February 8, 2001, was amended in 2003, was updated in 2005, was amended in 2008, and was amended in 2009; and,

WHEREAS, the Legislative Authority of the Political Subdivision has authorized a general compilation, revision, and codification of any existing ordinances, including but not limited to, the existing solid waste management plan to reflect several important facts to wit: (1) the population of Political Subdivision has decreased since 2001, (2) the Political Subdivision has no plans to import solid waste into this area, (3) the suggested revisions are necessary to stay current or in compliance with evolving Federal and State regulations as well as to needs of this community, (4) the Political Subdivision has been able to meet its existing solid waste management needs from existing facilities that demonstrates there is not a current need for a new landfill; and

WHEREAS, it is necessary to provide for the usual daily operation of Marlboro County and for the immediate preservation of the public peace, health, safety and general welfare of the Marlboro County citizens by adopting a new solid waste management plan.

NOW, THEREFORE, BE IT ORDAINED BY THE LEGISLATIVE AUTHORITY OF THE POLITICAL SUBDIVISION OF MARLBORO COUNTY, SOUTH CAROLINA.

<u>Section 1</u>. The solid waste management plan of the Political Subdivision as revised, amended, restated, codified, and compiled in a book form dated December 8, 2020 are hereby adopted in its entirety as and shall constitute the "Marlboro County Solid Waste Management Plan."

<u>Section 2</u>. Such solid waste management plan as adopted in Section 1 shall consist of the following titles:

- 1.0 Executive Summary
- 2.0 Legislative Authority
- 3.0 Demographics
- 4.0 Existing Solid Waste Management
- 5.0 Future Solid Waste Management
- 6.0 Goals, Policies, Strategies, and Barriers

7.0 Revision and Consistency with Waste Management Plans

8.0 Full Cost
List of Figures
List of Tables
Appendices

<u>Section 3</u>. All prior solid waste management plans pertaining to the subjects treated in such amended plan shall be deemed repealed from and after the effective date of this ordinance except as they are included and re-ordained in whole or in part in said Plan; provided, such repeal shall not affect any offense committed or penalty incurred or any right established prior to the effective date of this ordinance, nor shall such repeal affect the provisions of ordinances levying taxes, appropriating money, annexing or detaching territory, establishing franchises or granting special rights to certain persons, authorizing public improvements, authorizing the issuance of bonds or borrowing of money, authorizing the purchase or sale of real or personal property, granting or accepting easements, plat or dedication of land to public use, vacating or setting the boundaries of streets or other public places; nor shall such repeal affect any other ordinance of a temporary or special nature or pertaining to subjects not contained in or covered by the Plan.

<u>Section 4</u>. Such Plan shall be deemed published as of the day of its adoption and approval by the Legislative Authority and the Clerk of the Political Subdivision is hereby authorized and ordered to file a copy of such Plan in the Office of the Clerk.

<u>Section 5</u>. Such Code shall be in full force and effect as provided in Section 6, and such Code shall be presumptive evidence in all courts and places of the ordinance and all provisions, sections, penalties, and regulations therein contained and of the dare of passage, and that the same is properly signed, attested, recorded, and approved, and that any public hearings and notices thereof as required by law have been given.

<u>Section 6</u>. This ordinance is declared to be an emergency measure necessary for the immediate preservation of the peace, health, safety and general welfare of the people of Marlboro County and shall take effect at the earliest date provided by law.

PASSED AND ADOPTED by Marlboro County Council this 8th day of December,

Jason K. Steen, Chair Marlboro County Council

Patricia M. Bundy, Clerk Marlboro County Council

2020.

(SEAL)

ATTEST:

First Reading:

November 10, 2020

Second Reading: November 19, 2020 Public Hearing: December 8, 2020

Third Reading: December 8, 2020

# Marlboro County Solid Waste Management Plan Marlboro County, South Carolina



#### PREPARED FOR:

Marlboro County
Post Office Box 419
Bennettsville, South Carolina 29512

#### PREPARED BY

S&ME, Inc. 301 Zima Park Road Spartanburg, South Carolina 29301 S&ME Project No. 4226-20-049

## **Table of Contents**

1.0	Executive Summary	1
1.1	Plan Development	2
1.2	Plan Revision	2
1.3	Annual Progress Reports	2
2.0	Legislative Authority.	3
2.1	Federal & State Authority	3
2.2	Existing County Ordinance	3
2.3	Solid Waste Policies	3
2.4	Organization Structure	3
3.0	Demographics	5
3.1	Population Trends	5
3.2	Economic Trends	5
3.3	Land Description	6
3.4	Tourism	6
4.0	Existing Solid Waste Management	7
4.1	Generation and Characterization	7
4.2	Collection, Temporary Storage, and Transportation of Solid Waste	7
4.3	Solid Waste Transfer Stations	9
4.4	Solid Waste Processing Facilities	12
4.5	Class One Landfills	12
4.6	Class Two Landfills	12
4.7	Class Three Landfills	12
4.8	Short Term Structural Fill	12
4.9	Solid Waste Incinerators	12
4.10	Composting and Wood Chipping/Shredding Facilities	13
4.11	Used Oil Collection and Processing Facilities	13
4.12	Waste Tire Haulers, Collection Facilities, Processing Facilities, and Disposal Facilities	13
4.13	Research, Development, and Demonstration (RD&D) Permits	13
4.14	Land Application of Solid Waste Permits	13

	4.15	Recycling Programs	14
	4.16	Special Wastes	14
	4.17	Household Hazardous Material (HHM)	14
	4.18	Import and Export of Waste	14
	4.19	Solid Waste Management Funding	14
5	.0 Future S	olid Waste Management	15
	5.1	Waste Stream Projections	
	5.2	Collection, Temporary Storage, and Transportation of Solid Waste	15
	5.3	Solid Waste Transfer Stations	16
	5.4	Solid Waste Processing Facilities	16
	5.5	Class One Landfills	
	5.6	Class Two Landfills	16
	5.7	Class Three Landfills	16
	5.8	Solid Waste Incinerators	16
	5.9	Composting and Wood Chipping/Shredding Facilities	17
	5.10	Used Oil Collection and Processing Facilities	
	5.11	Waste Tire Haulers, Collectors, Processing Facilities, and Disposal Facilities	17
	5.12	Research, Development, and Demonstration Permits	17
	5.13	Land Application of Solid Waste Permits	17
	5.14	Recycling Programs	17
	5.15	Special Wastes	18
	5.16	Household Hazardous Material	18
	5.17	Import and Export of Waste	18
	5.18	Treatment of Contaminated Soils	18
	5.19	Storm Debris Management	18
5	.0 Goals, P	olicies, Strategies, and Barriers	19
	6.1	Reduction Goals	
	6.2	Recycling Goals	
	6.3	Educational Programs	
	6.4	Technical Assistance	
	6.5	Barriers	20

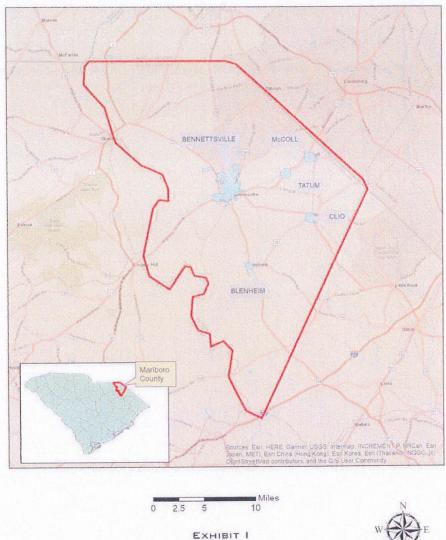
7.0 R	evision and Consistency with Waste Management Plans	22
7.1	Annual Progress Reports	22
7.2	Revisions to the Marlboro County Solid Waste Management Plan	22
7.3	Determining Consistency with County Solid Waste Management Plan	22
8.0 Fu	Il Cost	23
List of	Figures	
Exhibit I -	County and City Locations	1
Exhibit II -	Convenience Centers	8
Exhibit III -	Permitted Solid Waste Facilities	10
List of	Tables	
Table I – N	larlboro County Population Information	5
Table 2 - N	Marlboro County Population Projections	5
Table 3 – N	Marlboro County Solid Waste Disposal	7
Table 4 – N	Marlboro County Convenience Centers	9
Table 5 – N	Marlboro County Projected Solid Waste Disposal	14
Table 6- N	arlboro County Solid Waste Full Cost (Fiscal Year 2019)	22

Appendices

Appendix I – Marlboro County Solid Waste Ordinance

### 1.0 Executive Summary

Marlboro County is located in the Upper Pee Dee Region of South Carolina on the North Carolina border. It is surrounded by Dillon County and Robeson County, North Carolina to the east; Chesterfield County and Darlington County to the west; and Richmond County, North Carolina and Scotland County, North Carolina to the north. The total area of land and water in Marlboro County is approximately 485 square miles with a population of 26,398 (South Carolina Solid Waste Management 2019 Annual Report). Municipalities within the County include the City of Bennettsville, The Town of Blenheim, the Town of Clio, the Town of McColl, and the Town of Tatum (Exhibit I).



COUNTY AND CITY LOCATIONS MARLBORD COUNTY, SOUTH CAROLINA



### 1.1 Plan Development

Environmental concerns regarding landfilling prompted both the United States Environmental Protection Agency (herein the "EPA") and South Carolina's General Assembly to pass new laws and regulations pertaining to the disposal of solid waste. On May 27, 1991, Governor Carroll Campbell signed the South Carolina Solid Waste Policy and Management Act of 1991, as amended (herein the "Act") into law. Section 44-96-80 established requirements for local county and regional Solid Waste Management Plans (Plan).

#### 1.2 Plan Revision

As outlined in the Act, the Plan must be reviewed and updated as necessary. Plan revision is addressed in Section 7.2.

### 1.3 Annual Progress Reports

Annual Progress Reports are required by the Act for each fiscal year (July 1 - June 30) and are due to SCDHEC by October of each year. Annual Progress Reports are addressed in Section 7.1.

### 2.0 Legislative Authority

### 2.1 Federal & State Authority

The primary federal law relating to solid waste management is the Resource Conservation and Recovery Act (RCRA) of 1976, administered by the EPA. The first section of this law, Subtitle C (Hazardous Waste), established a national regulatory program to control the management of hazardous wastes. South Carolina received authorization from the EPA to initiate these activities in 1985. The second section of RCRA is Subtitle D (Solid Waste), published in the Federal Register on October 9, 1991. This section established a framework for federal, state, and local government cooperation in solid waste management. As a result of this law, the federal government provides national standards for protecting human health and the environment and technical assistance to states for planning and implementing their own solid waste management policies.

The principal law that governs solid waste management within the State of South Carolina is the Solid Waste Policy and Management Act of 1991 (Amended May 12, 2015). This Act authorized SCDHEC to enforce the appropriate federal and state standards. Section 44-96-80(J) of the Act gives the governing body of each county the responsibility and authority to provide for the management of solid waste within the county. Section 44-96-80(K) authorizes each county to enact ordinances that may be necessary to carry out the county's responsibilities.

### 2.2 Existing County Ordinance

Marlboro County's ordinance adopting this Plan is included in Appendix I.

#### 2.3 Solid Waste Policies

It is the policy of Marlboro County to manage solid waste in an efficient and economical manner while protecting human health and the environment. It also is the policy of the County to recycle and reuse materials as is practicable because it is preferable to promote the recycling and reuse of materials rather than the treatment, storage or disposal of wastes.

#### 2.4 Organization Structure

The Marlboro County Council is the governing body regarding solid waste planning and disposal within the County. The Marlboro County Council addresses solid waste issues upon the recommendation from the Marlboro County Administrator, and the Marlboro County Public Services Director. The Public Services Director oversees daily solid waste management and makes recommendations to the County Administrator, and the County Council, as needed. The organizational structure for Marlboro County staff is as follows:

County Administrator
Post Office Box 419, 205 East Market Street
Bennettsville, South Carolina 29512
Phone: 843-479-5600

Public Services Director
Post Office Box 419, 205 East Market Street
Bennettsville, South Carolina 29512
Phone: 843-479-5600

Recycling Coordinator
Post Office Box 419, 205 East Market Street
Bennettsville, South Carolina 29512
Phone: 843-479-5602

### 3.0 Demographics

### 3.1 Population Trends

Five municipalities are located in Marlboro County; Bennettsville, Blenheim, Clio, McColl, and Tatum. Table 1 illustrates the approximate population of Marlboro County from 1990 to 2019, including the percent change over the period.

Table I - Marlboro County Population Information

Year	Population
1990	29,716
2000	28,818
2010	28,933
2019 (estimate)	26,118
% Change	-12%

Source: US Bureau of the Census Data

Based on the existing census data and the 2019 population estimate, the Marlboro County population has decreased approximately 12 percent since 1990. Population projections prepared by the South Carolina Revenue and Fiscal Affairs Office, predict that over the next fifteen years, Marlboro County will experience an approximately 19% decrease in population, and should experience a similar decrease in its solid waste generation. Table 2 illustrates the projected population over a fifteen-year period (2020-2035) for the County.

Table 2 - Marlboro County Population Projections

Year	Projected Population
2020	25,725
2025	24,050
2030	22,430
2035	20,820
% Change	-19%

Source: South Carolina Revenue and Fiscal Affairs Office Population and Populations Projections 2000-2035

#### 3.2 Economic Trends

The characteristics of a local economy are significant indicators of growth. Changes in the economic base will directly affect solid waste management within Marlboro County and are an integral part of solid waste planning. The availability and type of employment impacts the demand for housing, retail trade, and services.

Industry and business in Marlboro County are crucial factors in solid waste planning. Since at least 2008, Marlboro County has had a higher unemployment rate than the South Carolina average. Based on the historic unemployment rate and estimated population decrease, large industrial growth in Marlboro County is not anticipated.

### 3.3 Land Description

Land use is an important characteristic to be evaluated in the development and implementation of a solid waste management system because it indicates areas of growth and urban development, both of which result in increased waste generation. In addition, areas of concentrated growth can cause congestion, which could adversely affect the collection and transportation of solid waste.

Marlboro County is in the eastern portion of South Carolina (Exhibit I) and encompasses approximately 485 square miles. Marlboro County is located within the upper portion of the Coastal Geologic Province of South Carolina and is near the "fall line" boundary between the Coastal Plain and the Piedmont Geologic Provinces of South Carolina.

The City of Bennettsville serves as the county seat. The primary transportation routes in Marlboro County are United States Highway 9, 15/40, and South Carolina Highway 38. Interstate 95, a major north – south corridor is to the east. The majority of Marlboro County is rural and undeveloped. The presence of surface water bodies and adjacent flood prone areas preclude certain areas of the County from development.

#### 3.4 Tourism

Marlboro County does not currently track tourism numbers, as tourism is not a primary source of income for the County.

### 4.0 Existing Solid Waste Management

#### 4.1 Generation and Characterization

The Act requires that all solid waste facilities conduct accurate recordkeeping of waste stream data as shown in Table 3 below. Counties must submit Annual Progress Reports to SCDHEC as required by the Act. The following amounts and types of wastes were generated for disposal in Marlboro County and were disposed of in various landfills during the 2019 fiscal year according to the 2019 South Carolina Solid Waste Management Annual Report:

Table 3 - Marlboro County Solid Waste Disposal

Туре	Waste (tons - 2019)	Generation (pounds per person per day)	
Class One (land clearing debris)	0	0	
Class Two (construction and demolition debris)	18,746	3.89	
Class Three (MSW, C&D debris, and industrial solid waste)	15,189	3.15	
Total Solid Waste Generated	33,935	7.04	

Source: South Carolina Solid Waste Management Annual Report FY2019 - pounds per person per day (ppd) = tons × 2,000 ÷ population (26,398) ÷ 365

### 4.2 Collection, Temporary Storage, and Transportation of Solid Waste

Marlboro County currently owns and operates three drop-off sites (convenience centers) for county residents (identified on Exhibit II, and summarized in Table 4). Consolidation of existing convenience centers and/or construction of additional convenience centers may occur based on the needs of the County.

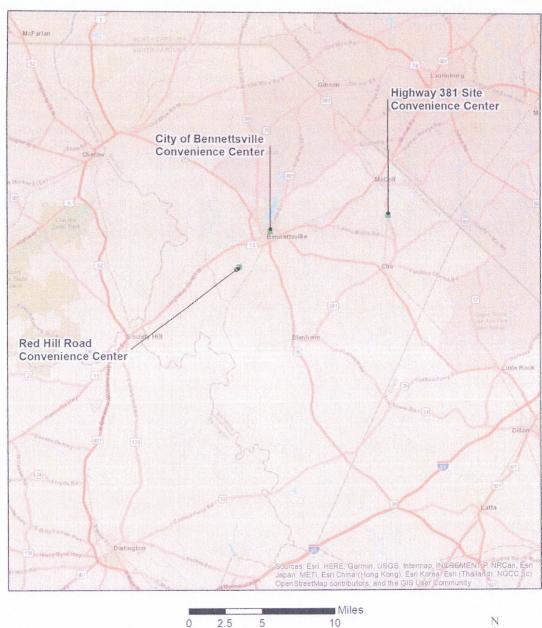


EXHIBIT II

CONVENIENCE CENTERS

MARLBORO COUNTY, SOUTH CAROLINA



Table 4 - Marlboro County Convenience Centers

Name	Location	Waste Accepted	Hours/Days of Operation
City of Bennettsville	501 East Main Street Bennettsville, SC	C&D Waste, Electronics, Used Oil and Filters, Used Tires, White Goods, Used Automotive Batteries	8 am - 4:30 pm Monday - Saturday
Red Hill Road	1264 Red Hill Road Bennettsville, SC	C&D Waste, Electronics, Used Oil and Filters, Used Tires, White Goods, Used Automotive Batteries	10 am-6 pm Monday, Wednesday and Friday 9 am – 1 pm Saturday
Highway 381	1049 Highway 381 McColl, SC	C&D Waste, Electronics, Used Oil and Filters, Used Tires, White Goods, Used Automotive Batteries	10 am – 6 pm Thursday and Friday 9 am – 1 pm Saturday

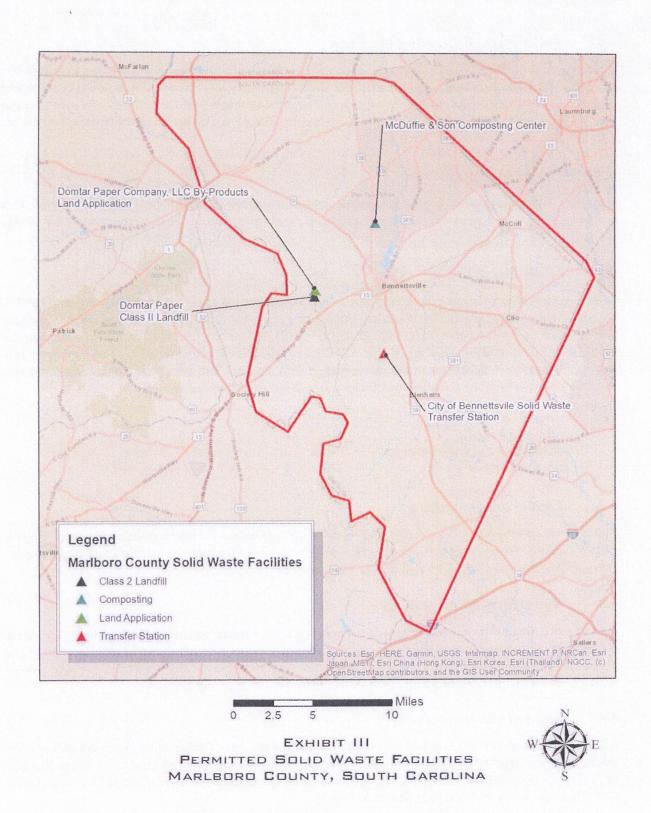
Residential curbside collection is provided to unincorporated areas of the County for a fee. The municipalities within Marlboro County (Bennettsville, Blenheim, Clio, McColl, and Tatum) also provide residential curbside collection for a fee. The collected MSW is disposed of at facilities outside of Marlboro County. MSW collected by Marlboro County is disposed at a landfill in Polkton, North Carolina, operated by Waste Connections. MSW collected by local municipalities also is disposed of at the Polkton, North Carolina landfill or the Lee County, South Carolina Landfill.

#### 4.3 Solid Waste Transfer Stations

Solid waste transfer stations are combinations of structures, machinery, or devices at a place or facility where solid waste is taken from collection vehicles and placed in other transport vehicles for movement to another solid waste management facility. The City of Bennettsville Solid Waste Transfer Station (Facility ID No. 351002-6001) is located at the closed City Landfill off Red Hill Road approximately 1/8 miles east of Road 292 (Exhibit III) and has a permitted transfer rate of 50 tons per day (tpd). The transfer station only accepts waste collected by the City of Bennettsville and does not accept waste from any other sources. The City currently transports the solid waste to a

Landfill in Lee County, South Carolina for disposal. Contact information for the City of Bennettsville Transfer Station is listed below:

The City of Bennettsville Public Works Department 501 E. Main Street Bennettsville, South Carolina 29512 Telephone: (843) 479-9001 (x310)



### 4.4 Solid Waste Processing Facilities

A solid waste processing facility is any combination of structures, machinery, or devices utilized to reduce or alter the volume, chemical, or physical characteristics of solid waste through processes such as baling or shredding, prior to delivery of such waste to a recycling or resource recovery facility, or to a solid waste treatment, storage, or disposal facility, and excludes collection vehicles. There are no solid waste processing facilities within Marlboro County.

#### 4.5 Class One Landfills

Approvals to operate landfills for land-clearing debris and yard waste (Class One) are issued by SCDHEC under an existing statewide general permit for landfills used solely for the disposal of trees, stumps, wood chips, and yard waste generated from land clearing activities. There are no active Class One landfills in Marlboro County.

#### 4.6 Class Two Landfills

Class Two Landfills are designed to accept various inert wastes such as Construction, Demolition, and Land-Clearing Debris (C&D), and industrial wastes. There is one operating Class Two landfill in Marlboro County, owned and operated by Domtar Paper (Facility ID No. 353301-1601) (Exhibit III). This landfill is a private commercial landfill with a permitted annual disposal rate of 12,000 tons (SCDHEC FY 2019 Solid Waste Management Annual Report). This facility only accepts waste generated by the facility and does not accept outside waste. Additional information regarding this facility can be obtained at SCDHEC or at the address below:

Domtar Paper Company LLC Post Office Box 678 Bennettsville, South Carolina 29512 (843) 479-0200

#### 4.7 Class Three Landfills

A Class Three Landfill is one designed to receive wastes such as household waste, sludge, incinerator ash and certain industrial waste, but is not a land application unit, surface impoundment, injection well, or waste pile. There are no operating Class Three Landfills in Marlboro County.

#### 4.8 Short Term Structural Fill

A short term structural fill is a very restricted temporary activity whereby hardened concrete, hardened asphaltic concrete, bricks, masonry blocks and land-clearing debris may, under a permit-by-rule, be disposed of in an area of one acre or less for a period not to exceed twelve months. Such sites must be registered and approved by SCDHEC. There are no operating short term structural fill areas in Marlboro County.

#### 4.9 Solid Waste Incinerators

A solid waste incinerator is any engineered device used in the process of controlled combustion of waste for the purpose of reducing the volume, and/or reducing or removing the hazardous potential of the waste charged by destroying combustible matter, leaving the noncombustible ashes, material, and/or residue. There are no permitted solid waste incinerators in Marlboro County.

### 4.10 Composting and Wood Chipping/Shredding Facilities

Composting facilities are utilized to provide aerobic, thermophilic decomposition of the solid organic constituents of solid waste to produce stable, humus-like material. One composting facility is in Marlboro County (Exhibit III). McDuffie and Sons Composting Center (Facility ID No. 352691-3001) is located along Highway 38 north of Bennettsville.

### 4.11 Used Oil Collection and Processing Facilities

Used oil, oil filters, and oil bottles generated by residents of Marlboro County are collected at each of the County's convenience centers, all listed in Table 4 and Exhibit II. Used oil is collected at these sites in tanks provided by Santee Cooper's Give Oil for Energy Recovery (GOFER) program. The GOFER tanks are covered with canopies and located within secondary containment systems. Santee Cooper removes the used oil from the tanks when they reach capacity and transport the used oil to a power plant where the oil is fuel to generate electricity. No used oil processing facilities are currently located within the County.

# 4.12 Waste Tire Haulers, Collection Facilities, Processing Facilities, and Disposal Facilities

Waste tires are collected at selected Marlboro County Convenience Centers (Table 4 and Exhibit II) from residents at no charge, provided they are accompanied by a tax receipt showing the SC Tire Tax was paid. The tires are then transported to a facility located outside of Marlboro County for recycling. No waste tire haulers, processing facilities, or disposal facilities are currently located in Marlboro County.

### 4.13 Research, Development, and Demonstration (RD&D) Permits

RD&D Permits are issued for innovative and experimental solid waste management technologies and processes. No research, development, and demonstration permits have been issued for solid waste facilities within Marlboro County.

### 4.14 Land Application of Solid Waste Permits

Permits for the land application of solid waste establish appropriate application rates, frequency of application, and monitoring requirements for the uniform surface spreading or mechanical incorporation of nonhazardous solid waste on or into soil that is being used for agricultural, silvicultural, and horticultural production. Land application of solid waste is a way to recycle South Carolina's resources and is not a means of waste disposal. There is one permitted land application facility in Marlboro County which is owned and operated by Domtar Paper (Facility ID No. 353301-8001). This facility is located along Willamette Road west of Bennettsville (Exhibit III). This facility only accepts waste generated by the facility and does not accept outside waste.

Additional information regarding this facility can be obtained at SCDHEC or at the address below:

Domtar Paper Company LLC Post Office Box 678 Bennettsville, South Carolina 29512 (843) 479-0200

### 4.15 Recycling Programs

Recycling programs within Marlboro County are voluntary, using the convenience centers or municipalities that provide curbside pickup of recyclables. The convenience centers are equipped with specially marked bins and containers to accept recyclables. Based on the South Carolina Solid Waste Management Annual Report, 2,569 tons of waste were recycled in FY 2019 which resulted in a recycling rate of 0.53 pounds per person per day (ppd). The bulk of the recycled waste originated from industrial facilities. Marlboro County has a recycling coordinator whose duties include SCDHEC reporting and monitoring the convenience centers.

#### 4.16 Special Wastes

Special Waste is defined as commercial or nonresidential solid waste, other than regulated hazardous wastes, that is either difficult or dangerous to handle and requires unusual management at MSW landfills, including but not limited to pesticide wastes, liquid wastes, sludge, industrial process wastes, wastes from pollution control processes, residue or debris from chemical cleanups, contaminated soil from a chemical cleanup, containers and drums, animal carcasses, coal ash or coal combustion residuals. Special Waste is not permitted for disposal at any of the public solid waste disposal facilities located in Marlboro County.

#### 4.17 Household Hazardous Material (HHM)

HHM is defined as material found around the home, usually in small amounts, which can harm people or the environment. Examples of HHM include paint, pesticides, cleaning supplies and batteries. HHM is not regulated as hazardous by South Carolina law but is considered part of the MSW stream. Marlboro County does not currently collect HHM separately from the MSW stream.

#### 4.18 Import and Export of Waste

Marlboro County does not import waste generated outside of the County. Marlboro County exports its MSW to a permitted Class Three landfill located in Polkton, North Carolina. Marlboro County will continue to export its municipal solid waste to the Polkton landfill or other suitable facility outside of the County for the twenty-year planning period. Likewise, waste collected by the five municipalities in the County are also exported out of the County for disposal.

#### 4.19 Solid Waste Management Funding

Marlboro County currently receives solid waste management funding through tax revenues from the County's General Fund. Revenues from recycled materials sales and other receipts are returned to the County's General Fund. These sources of revenue have shown to be sufficient to fund all solid waste management operations for Marlboro County.

### 5.0 Future Solid Waste Management

### 5.1 Waste Stream Projections

Waste generation rates obtained from the 2019 South Carolina Solid Waste Management Annual Report are presented below. Based on these amounts and the projected population estimates obtained from the South Carolina Revenue and Fiscal Affairs Health and Demographics Section, the projected waste stream amounts are presented in Table 5.

- Class One there was no Class One waste disposal based on the 2018 and 2019 South Carolina Solid
   Waste Management Annual Reports.
- Class Two 18,746 tons of Class Two solid waste were disposed of in 2019. Based on the estimated 2019 population of 26,398, the Class Two waste disposal rate was 3.89 ppd.
- Class Three 15,189 tons of Class Three solid waste was disposed of in 2019. Based on the estimated
   2019 population of 26,398, a Class Three waste disposal rate was 3.15 ppd.

Year	Projected Population	Projected Class One Tons (none disposed in FY 2018 or 2019)	Projected Class Two Tons (3.89 ppd)	Projected Class Three Tons (3.15 ppd)
2020	25,725	0	18,263	14,789
2021	25,385	0	18,021	14,593
2022	25,060	0	17,791	14,406
2023	24,720	0	17,549	14,211
2024	24,400	0	17,322	14,027
2025	24,050	0	17,074	13,826
2026	23,745	0	16,857	13,650
2027	23,395	0	16,609	13,449
2028	23,075	0	16,382	13,265
2029	22,760	0	16,158	13,084
2030	22,430	0	15,924	12,894
2031	22,120	0	15,704	12,716
2032	21,790	0	15,469	12,527
2033	21,475	0	15,246	12,345
2034	21,145	0	15,011	12,156
2035	20,820	0	14,781	11,969

Table 5 - Marlboro County Projected Solid Waste Disposal

#### 5.2 Collection, Temporary Storage, and Transportation of Solid Waste

Marlboro County's current methods of solid waste collection, temporary storage and transportation are sufficient for projected waste generation in the County based on projected population. Marlboro County is evaluating the

possibility of consolidating existing convenience centers or siting and constructing new convenience centers in strategic locations throughout the County.

#### 5.3 Solid Waste Transfer Stations

One solid waste transfer station for Class Three waste is located within Marlboro County. There are no transfer stations for Class Two waste in the County. Based on projected waste generation, the County does not believe that its waste stream currently warrants the development of an additional transfer station. However, Marlboro County maintains the right to evaluate, site, permit, and construct a County-owned transfer station based on the future needs of the County.

#### 5.4 Solid Waste Processing Facilities

There are no solid waste processing facilities located within Marlboro County. Due to the projected negative population growth, Marlboro County is not evaluating the possibility of the development of a solid waste processing facility, and the construction of any such facility is prohibited within Marlboro County.

#### 5.5 Class One Landfills

There are no active Class One Landfills in the County. Due to the projected negative population growth, Marlboro County is not evaluating the possibility of the development of a Class One Landfill, and the construction of any such Class One Landfill is prohibited within Marlboro County. Sufficient capacity to accept projected waste streams is available at Class One Landfills located outside of the County.

#### 5.6 Class Two Landfills

One private Class Two Landfill (Domtar Paper) is located within the County. This landfill only accepts waste generated at the facility and does not accept outside waste. Due to the projected negative population growth and the declining C&D waste generation projection, Marlboro County is not evaluating the possibility of the development of a Class Two Landfill, and the construction of any such Class Two landfill is prohibited within Marlboro County. Sufficient capacity to accept projected waste streams is available at Class Two Landfills located outside of the County.

#### 5.7 Class Three Landfills

There are no active Class Three Landfills in the County. Due to the negative population growth and the declining municipal solid waste generation projection, Marlboro County will continue to transport its municipal solid waste to a permitted facility outside of Marlboro County, and the construction of any Class Three landfill is prohibited within Marlboro County. Sufficient capacity to accept projected waste streams is available at Class Three Landfills located outside of the County.

#### 5.8 Solid Waste Incinerators

There are no active solid waste incinerators in the County. The County has no plans to design, permit, or construct a solid waste incinerator within Marlboro County. Due to the projected negative population growth and the declining municipal solid waste generation projection, Marlboro County has adequate disposal capacity of MSW at facilities located outside of the County. However, temporary air curtain incinerators may be permissible in severe debris-generating events, such as significant tornadoes, earthquakes, winter storms, and hurricanes, if

approved in advance by the County. Extreme conditions warranting emergency response actions may allow temporary facilities in accordance with disaster areas identified by the State of South Carolina Governor's Office, if approved in advance by the County.

### 5.9 Composting and Wood Chipping/Shredding Facilities

One composting and wood chipping facility (McDuffie & Son) is located within the County. Marlboro County encourages the concept of composting to reuse natural resources and conserve landfill space. Marlboro County encourages the development of properly permitted compositing and wood-chipping/shredding facilities, if approved in advance by the County.

### 5.10 Used Oil Collection and Processing Facilities

Marlboro County utilizes three used oil collection sites. If new convenience centers and recycling centers are established, new oil collection sites may be implemented at those sites. Through the County's participation in Santee Cooper's GOFER program, all collected used oil is transported and processed at an out-of-County facility. Marlboro County plans to continue participating in the GOFER program or similar program.

### 5.11 Waste Tire Haulers, Collectors, Processing Facilities, and Disposal Facilities

Marlboro County will continue to collect waste tires at its convenience centers and arrange for the transport and recycling of these materials at an out-of-County facility. Marlboro County prohibits the development of waste tire disposal facilities within the County.

### 5.12 Research, Development, and Demonstration (RD&D) Permits

Marlboro County supports the development of new technology to improve the efficiency and environmental protection as related to solid waste management. As new technology and grant money become available in the future, the County will further evaluate the possibility of pursuing an RD&D permit from SCDHEC. Entities privately pursing a RD&D permit from SCDHEC are encouraged to communicate with Marlboro County prior to permitting to ensure that the facility meets the standards and expectations of the County. Any such RD&D permit must be approved in advance by the County.

### 5.13 Land Application of Solid Waste Permits

One permitted land application facility operated by Domtar Paper is located within the County. This facility only accepts waste generated at the facility and does not accept outside waste. Marlboro County does not plan on pursuing any permits for the land application of solid waste.

### 5.14 Recycling Programs

Due to the rural nature of the unincorporated areas of Marlboro County, the County will continue to rely on drop-off centers as its primary means of collecting recyclables during the planning period. As recycling technology and commodity markets become more advanced, Marlboro County will evaluate further recycling opportunities. For FY19, citizens of the County disposed of 3.15 ppd of MSW compared to the statewide average of 3.72 ppd and the statewide reduction goal of 3.25 ppd, indicating the success of Marlboro County's recycling efforts.

### 5.15 Special Wastes

Special wastes are prohibited at solid waste management facilities in Marlboro County. Handling methods required by special wastes are considered by Marlboro County to be the responsibility of the owner to ensure these materials are properly managed and disposed of.

### 5.16 Household Hazardous Materials (HHM)

The County supports the separation of HHM from the MSW stream; however, the County does not plan on implementing an HHM program at this time due to the rural nature of the County, high cost of implementation, training of personnel, transportation and disposal. Marlboro County recognizes that the proper disposal of HHM is important for protecting human health and the environment and will continue to evaluate the feasibility of implementing an HHM program in the future.

### 5.17 Import and Export of Waste

Marlboro County has no plans to import waste generated outside of the County. Marlboro County exports its municipal waste to a properly permitted MSW landfill located in Polkton, Anson County, North Carolina that is operated by Waste Connections. Marlboro County will continue to export its MSW to this landfill or other suitable facility outside of the County for the twenty-year planning period. Based on the projected negative waste generation within the County, there is no current or projected need for a Class Three landfill in the County for the twenty-year planning period, and a Class Three landfill is prohibited in the County. Likewise, MSW collected by the five municipalities in the County also is exported out of the County for disposal.

### 5.18 Treatment of Contaminated Soils

Contaminated soils are prohibited at solid waste management facilities in Marlboro County. Handling methods required by contaminated soils are considered by Marlboro County to be the responsibility of the owner to ensure these materials are properly managed and disposed of. Upon discovery of contaminated soils on Marlboro County property, the County will take necessary steps for removal and proper disposal or treatment of the soils in accordance with solid waste regulations.

### 5.19 Storm Debris Management

Marlboro County maintains equipment to manage tree debris from a potential catastrophic storm event. Permitting for these activities is not required, according to Part II of R 61-107.4.

### 6.0 Goals, Policies, Strategies, and Barriers

#### 6.1 Reduction Goals

According to the South Carolina Solid Waste Management Annual Report for Fiscal Year 2019 the solid waste management and recycling goal is as follows:

"The State's goal is to recycle at least 40 percent of its MSW and reduce MSW disposal to 3.25 pounds (or less) per person per day (p/p/d) by 2020."

For FY19, citizens of the County disposed of 2.08 ppd of waste. Even though Marlboro County exceeded the State reduction goal, the County will continue to work to improve by working with residents, businesses and organizations to reduce the amount of MSW. A continued source reduction education effort is anticipated to decrease the amount of waste transported for disposal in landfills. Marlboro County has taken positive steps toward source reduction with the implementation of a voluntary recycling program, including waste tire recycling and used oil recycling at County convenience centers. The public will continue to be informed of the benefits of recycling and the various ways in which residents can help in this endeavor, including billboard signage, newspaper advertisements and social media.

### 6.2 Recycling Goals

For Fiscal Year 2019 the County recycled 20.42 percent of the MSW generated. To meet the State goal of 40 percent, Marlboro County will continue to promote public education to inform residents of recycling programs being implemented within Marlboro County and the best way for each resident to participate. The public will continue to be informed of the benefits of recycling and the various ways in which residents can help in this endeavor, including billboard signage, newspaper advertisements and social media. Marlboro County currently accepts approved materials for recycling and is considering expansion of future materials to be accepted for recycling.

### 6.3 Educational Programs

Educational efforts will target the residents of Marlboro County with an emphasis on the curbside collection areas and convenience centers. The programs will be evaluated and revised according to the change in resident's behavior as indicated by the MSW stream reduction and increase in the collection of recyclable material. Marlboro County currently performs an annual roadside cleanup day that includes solicitation of public assistance of the roadside cleanup activities. The cleanup day is advertised on billboard signage, local newspaper advertisements and social media.

The South Carolina Office of Solid Waste Reduction and Recycling was created by the Solid Waste Policy and Management Act of 1991 and is part of the Division of Mining and Solid Waste Management. The Office of Reduction and Recycling, in accordance with the Act of 1991, provides educational, technical, and grant assistance to local governments, schools, colleges and universities and the public regarding solid waste management issues. Marlboro County has worked with, and will continue to work with the Office of Reduction and Recycling to obtain assistance with its public education campaign and grant preparation.

#### 6.4 Technical Assistance

The contact for information concerning MSW management, recycling, and source reduction in the state is as follows:

Department of Health and Environmental Control
Office of Solid ·Waste Reduction and Recycling
2600 Bull Street Columbia, SC 29201
Phone: 1-800-768-7348
https://scdhec.gov/environment/recycling-waste-reduction

Additional County contacts are as follows:

County Administrator
Post Office Box 419, 205 East Market Street
Bennettsville, South Carolina 29512
Phone: 843-479-5600

Public Services Director
Post Office Box 419, 205 East Market Street
Bennettsville, South Carolina 29512
Phone: 843-479-5600

Recycling Coordinator
Post Office Box 419, 205 East Market Street
Bennettsville, South Carolina 29512
Phone: 843-479-5602

#### 6.5 Barriers

The County recognizes that there are many barriers restricting recycling. and is attempting to alleviate these barriers by continuing to promote recycling within the County. The following barriers are faced by both the public and private sectors in Marlboro County, making increasing the recycling rate within the County difficult:

- Low tipping fees for disposal facilities located outside of the County.
- Lack of Funding Lack of funding from local, state, and federal sources may lead to fewer improvements to existing infrastructure as well as the possibility of cutting recycling services. To combat this, the County must apply for grants, as available, and consider these expenditures when deciding the budget.
- Lack of Markets The lack of markets for certain recyclables means low prices for these materials resulting in these types of recyclables being dropped from many recycling services. The County will continue to evaluate future markets for recyclables and implement the collection of these materials when the market indicates.
- Lack of Awareness Despite all that has been done to promote recycling, a large percentage of the
  population does not recognize the benefits of recycling. Marlboro County provides its residents with
  educational opportunities and programs to promote recycling in the County and will continue to promote
  recycling to its residents.

- Lack of Regulatory Requirements Recycling programs operating in the State are voluntary. Through
  educating its residents and providing recycling opportunities, Marlboro County promotes participation in
  recycling programs.
- MSW Generated by Businesses Recycling efforts have focused primarily on residential programs, even though businesses are estimated to generate more than fifty percent (50%) of the State's MSW. Businesses are provided with inexpensive disposal options, that provide little incentive to reduce their wastes. Businesses are included as a part of the County's recycling education program, to allow businesses to evaluate their waste disposal practices on an annual basis.
- Lack of Accountability Until the recent promotion of recycling, local governments have held the
  responsibility for the end-of-life costs of managing materials. No incentives had been given for producers,
  sellers, and consumers to reduce the waste associated with products. Through recycling education,
  Marlboro County has promoted recycling to these groups.

These barriers contribute to low recycling volumes and high disposal volumes. Marlboro County is dedicated to adhering to the standards established in the Act. To accomplish these goals, Marlboro County will evaluate means to address these barriers, as discussed in this Plan.

## 7.0 Revision and Consistency with Waste Management Plans

### 7.1 Annual Progress Reports

Section 44-96-60 of the Act requires SCDHEC to submit, to the Governor and General Assembly, a comprehensive report on solid waste management in South Carolina, by March 15 of each calendar year. Therefore, SCDHEC requires each county or region to submit an Annual Progress Report to the Department by October 1 of each year. The Annual Progress Report contains, at a minimum, the following:

- Any revisions to the Solid Waste Management Plan previously submitted by the county;
- The amount, type, and percentage of materials that were recycled, if any, during the previous year;
- The percentage of the population participating in various types of source separation, recovery, or recycling activities during the previous year; and
- A description of the source separation, recovery or recycling activities or all of the above activities attempted, if any, their success rates, the reasons for their success or failure, and a description of such activities, which are ongoing.

### 7.2 Revisions to the Marlboro County Solid Waste Management Plan

Section 44-96 80(E) of the Act states that all solid waste management plans shall be consistent with the South Carolina solid waste management plan, provisions of state law and regulations promulgated by SCDHEC for the protection of public health and safety and the protection of the environment. The Marlboro County Solid Waste Management Plan is reviewed periodically and revised as needed to ensure consistency with these provisions. Reviews and revisions are conducted by the Marlboro County Administrator or the Administrator's designee. All proposed revisions to the Plan are subject to public notice to provide opportunity for public and local government input. Revisions to this Plan must be submitted by the Director of Public Works to the County Administrator and approved by the Marlboro County Council. The effective date of the revisions to the Plan will be the date the suggested revisions are approved by resolution of the Marlboro County Council after public input. Any revisions made to the Marlboro County Solid Waste Management Plan shall be submitted to SCDHEC. SCDHEC may accept revisions to the Plan only from the Marlboro County Administrator or the Administrator's designee.

### 7.3 Determining Consistency with County Solid Waste Management Plan

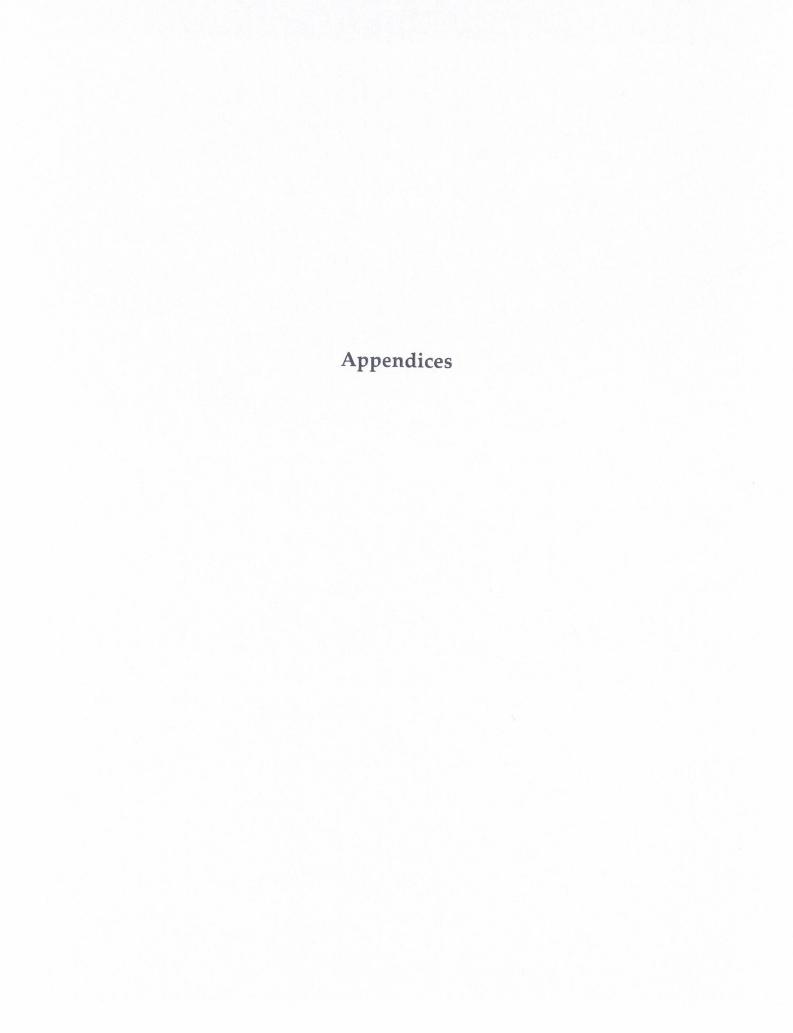
Any applicant for any permit required by the Act must submit a request for a solid waste management plan consistency determination through SCDHEC. All correspondence to SCDHEC regarding a consistency determination also shall be provided to the Marlboro County Administrator at the same time it is submitted to SCDHEC. Only the Marlboro County Administrator may comment to SCDHEC regarding all consistency correspondence.

### 8.0 Full Cost

In accordance with the Act of 1991, Marlboro County annually determines the full cost for solid waste management services. Such figures help to determine the annual solid waste/recycling fee. The County publishes a notice in the Fall of each year setting forth the full cost to all users, on an individual basis, of its solid waste management services for the previous Fiscal Year. Table 6 below gives the full cost disclosure based on the Fiscal Year 2019 Budget.

Table 6- Marlboro County Solid Waste Full Cost (Fiscal Year 2019)

Item	Amount
Total Net Cost	\$218,221
Population	26,398
Cost per Capita	\$8.27



# Appendix I – Marlboro County Solid Waste Ordinance