

ARTICLE 3 – SOLID WASTE DISPOSAL

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3-1 SOLID WASTE MANAGEMENT AND RECYCLING PLAN

1. Solid Waste Statement

A description of the methods of solid waste and recycling storage, collection and disposal shall be provided in the form of a Solid Waste and Recycling Statement on any Preliminary Plat, Special Use or Rezoning Development Plan or Site Plan. This requirement will ensure that each project will meet all provisions regarding solid waste disposal.

2. Solid Waste Statement Elements

The following elements shall be noted in the Solid Waste Plan Statement.

A. Solid waste storage. A statement regarding which of the following methods shall be employed for solid waste storage:

- (1) Centralized refuse storage rooms. Location of refuse rooms shall be noted on plans.
- (2) Large, outside (commercial) containers.
- (3) Individual household containers.
- (4) Alternate systems. If any alternative storage and disposal system is employed, give a description of such a system, and note its location on the plan. Examples:

- a. Centralized refuse compactors
- b. Refuse shredders
- c. Recycling systems

B. Collection. A statement regarding which of the following will provide solid waste collection:

- (1) Private refuse collection company
- (2) Project owners or management

C. Disposal. A statement indicating the location of refuse disposal.

- (1) All refuse must be disposed of at County approved disposal sites.

(the above is now located at 3-2.M)

D. A signed copy of the Waste Stream Calculation Worksheet must accompany the Solid Waste Statement. The Waste Stream Calculations Worksheet only applies to multi-family and non-residential properties. Single Family and detached dwelling units are not subject to the Waste Stream Calculation requirement.

3-2 DESIGN STANDARDS FOR COLLECTION AND STORAGE FACILITIES

A. The location of the designated pad for the collection of trash and recycling shall be depicted on the plan. The pad must be constructed of a material suitable to withstand

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proposed loads. An area 30 feet in front of the pads should also be reinforced to withstand the weight of collections vehicles. In instances when site constraints prohibit total concrete surfacing, a concrete service pad extending 13 feet in front of the enclosure shall be provided to withstand pressure of the front wheels of the service vehicle under maximum load.

- B. Collection and storage areas shall be placed a minimum of 15 feet away from any structure.
- C. Access to collection and storage areas shall be by internal travel ways and parking areas. Collection devices may not be accessed directly from a public street, and no backing movement from an internal collection device may encroach on any street (public or private). A waiver may be granted to allow encroachment if it is found to be the only available option for the internal collection device and that the backing movement encroachment does not impact site safety and/or negatively impact traffic flow. Parking areas should allow for a circular through movement wherever possible to avoid back-up movements. When circular through movement is not possible, maneuvering space in front of any dumpster must be provided. Backup and turnaround space must have a minimum width of 15 feet and a depth of 30 feet.
- D. All collection and storage areas shall be designed to provide positive drainage and be accessible to collection equipment, and state and/or local inspectors.
- E. Trash and recycling containers shall be placed adjacent to each other in the enclosure or in the same central storage area. The capacity for the trash and recycling containers and their storage areas must be adequate to accommodate the volume of material as projected on the Waste Stream Calculation Worksheet with a collection frequency of not less than once per week. Placement of recycling containers is not required at this time. However allowance for adequate space for recycling efforts is required as part of the design standard; the collection area must have sufficient area provided to accommodate a minimum of two (2) containers or more, of equal capacity, with 1/2 of the total capacity used for refuse collection and 1/2 of the total capacity used for recycle collection. If recycling is not being implemented as part of the project then the trash container shall be of sufficient size and collected on a rotation to accommodate 100% of waste stream from the property as calculated on the Waste Stream Calculation Worksheet.
- F. The designed pad for side by side dumpsters for collection and storage of trash and recyclable materials should be 22 feet wide by 10 feet. Additional space to accommodate additional containers, compactor

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equipment and/or storage areas shall be provided as needed.

- G. Areas designated for trash and recycling containers for multi-family properties should generally be located within 200 feet walking distance of the building being served unless otherwise approved.
- H. Minimum vertical clearance for front-end loading vehicles collection trash and recyclables stored in side by side dumpsters are 24 feet overhead and 10 feet width of clear opening.
- I. Required vertical clearance for safe access by roll off trucks used to pull stationary compactor units and roll off boxes at loading docks is 18 feet overhead for entry of the truck only, 24 feet when the truck hoist is raised with a rectangular box container and 11 feet width of clear opening.
- J. Required vertical clearance for safe access by rear loading refuse vehicles collecting trash and recyclables set out in roll carts, trash and recycling storage areas is 14 feet overhead and 10 feet width of clear opening.
- K. All developments other than those consisting of single family detached dwellings, including but not limited to townhouses, apartments, recreation facilities, public facilities and commercial, office, and sites that provide outside placement of refuse containers shall conform to the following standards:
 - (1) All refuse and recycling containers shall be screened from public view with a fence or architectural block wall. The fence or architectural block wall shall be solid on three sides. The fourth side, facing away from public view shall have a controlled access opening that provides a solid screen appearance when closed
 - (2) The solid fence or architectural block wall shall be a minimum of 2' above the refuse container height or 8' tall, whichever is higher. Such structure must meet minimum yard requirements.
- L. Where applicable, all site plans must show details of a typical garbage and trash storage area, the number of units to use each storage facility, the frequency and type of pickup, and the location of any shrubs, trees, or fencing used for screening purposes.
- M. Construction waste storage. A statement regarding the removal of stockpiled materials from the site upon completion of construction shall be provided as follows:

Stockpiled materials, including but not limited to stumps, brush, and construction debris shall be removed from the property and disposed of in accordance with Chapter 19 of the County Code (Solid Waste) or any other state or federal regulations.

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3-3 SOLID WASTE DISPOSAL FACILITIES

Debris landfills, sanitary landfills, transfer stations, energy recovery/incineration facilities shall be designed in accordance with the provisions of the Code of Virginia, Sections 10.1-1402 and 9-6.4, and “Solid Waste Management Regulations,” VR 672-20-10.

3-4 LITTER RECEPTACLES

1. General Requirements

Any person owning or operating any establishment or public place at which litter receptacles are required by Chapter 19 of the County Code shall, at his or her own expense, be responsible for the procuring, placing, and maintenance of receptacles as required by the Code.

2. Required Locations for Litter Receptacles

Litter receptacles are required at the following public places:

- A. Public highways
- B. Parks
- C. Campgrounds and trailer parks
- D. Eating Establishment. Carry out / Fast Food
- E. Self-service refreshment areas
- F. Construction sites
- G. Service stations
- H. Shopping centers
- I. Marinas, docks, and boating facilities, commercial
- J. Boat launching areas
- K. Public and private piers which are operated for public use
- L. Sidewalks in business districts

- M. Public buildings, including schools
- N. Sporting events, fairgrounds, and other similar events to which the public is invited

3. Minimum Standards for Litter Receptacles

- A. Litter receptacles purchased and placed in compliance with these requirements shall meet the following minimum standards for construction and maintenance. The receptacle shall:

- (1) Have a capacity of not less than 10 gallons.
- (2) Be constructed of such quality as to maintain the original shape when placed at an outdoor location and be resistant to rust and corrosion. The receptacles must be water tight containers. Construction and configuration of all receptacles shall be in conformance with all pertinent laws, ordinances, resolutions or regulations pertaining to fire, safety, public health, and welfare.
- (3) Be reasonably stationary and reasonably secure from movement and destruction by vandals.
- (4) Be constructed, covered, or used in such a manner as to prevent or preclude the blowing of litter from the receptacle.
- (5) Be serviced with a frequency sufficient to prevent spillage

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from overflow and the buildup of offensive odors.

- (6) Be maintained sufficiently to present an appearance which is aesthetically pleasing.

4. Optional Methods of Receptacle Identification

- A. The receptacle may also be identified by the state anti-litter symbol, by a local anti-litter symbol or logo, or by printed identification and instructions regarding proper uses.
- B. The receptacle may also be of a color which is readily visible.

5. Number and Location of Litter Receptacles

The following shall provide general guidelines for litter receptacle placement and frequency of placement.

- A. Public highways: One receptacle per turnout on the right-of-way, overlook, or rest stop, each of which is officially designated as such and determined to need a receptacle by the Virginia Department of Transportation.
- B. Trailer parks, recreational facilities and recreation areas, including parks, campgrounds, beaches, and bathing areas: One receptacle for each facility area at which food or drink is sold, plus additional receptacles as necessary to accommodate the need for a litter depository. The need for additional

receptacles should be determined by the operator of the facility.

- C. Shopping centers: Receptacles should be located along pedestrian travel routes normally taken by persons using the facility. The number and placement of receptacles should be 1 receptacle per 100 linear feet of store frontage.
- D. Mall or enclosed shopping centers: No less than 2 receptacles should be placed within 50' of every entrance or exit.
- E. Eating Establishment, Carry out / Fast Food: No less than 1 receptacle should be placed within 10' of every building entrance or exit, plus additional receptacles as necessary to contain litter generated by the facility. The need for additional receptacles should be determined by the operator of the facility.
- F. Self-service refreshment areas: One receptacle for each separate area provided each separate area contains 1 or more machines for dispensing, or serving food or drink.
- G. Service stations: One receptacle per service island.
- H. Construction sites: Receptacles sufficient to contain workmen's liner, plus those construction wastes capable of being spread by wind or water. The number of receptacles and the size should be determined by the primary contractor, but no

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- less than 1 receptacle should be
- I. Marinas, docks, and boating facilities, commercial: Receptacles should be placed sufficient in number to contain the litter generated by the use with a minimum of one container per facility.
 - J. Sporting events, fairgrounds, and other similar events: The placement and need for receptacles should be determined by the operator, sponsor, or group operating the event, except no less than 1 receptacle should be placed at every location where food or drink is available and no less than 1 receptacle should be located at every entrance / exit and along every 100' of normal pedestrian travel routes.
 - K. Public buildings including schools: One receptacle within 50' of every entrance or exit, provided receptacle placement should be consistent with need as determined by the person, agency, or group having primary responsibility for the operation of the facility.
- placed at each site.

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Spotsylvania County Multi-Family Waste Generation Report

The purpose of this report is to calculate the annual waste stream generated from a proposed project and to ensure adequate collection service is provided.

Step 1: Determination of Annual Waste Generation

Complete the table for the proposed project being submitted. In the column labeled “Floor Area” enter the amount of square feet being occupied by each use. Multiply each square footage figure by the corresponding value in the “Annual Waste Generation Rate

Building Use	Number of Units		Annual Waste Generation Rate (tons/unit)	=	Annual Waste Generation Rate (Tons)
Apartment		X	2.12	=	0
Condos		X	2.12	=	0
Townhomes		X	2.12	=	0
Duplex		X	2.12	=	0
Combined Annual Waste Stream					0

Step 2: Determination of Minimum Storage Capacity

Determination of Minimum Storage Container and/or Dumpster Size (With Onsite Recycle Program)

Combined Annual Waste Stream		Cubic Yards Per Ton		Number of Annual Collections (Minimum 52)		Number of Containers (Minimum 2)	=	Minimum Size of Each Storage Container or Dumpster (Cubic Yards)
0	X	8.88	÷	52	÷	2	=	0.0

Determination of Minimum Storage Container and/or Dumpster Size (Without Recycle Program)

Combined Annual Waste Stream		Cubic Yards Per Ton		Number of Annual Collections (Minimum 52)		Number of Containers (Minimum 1)	=	Minimum Size of Each Storage Container or Dumpster (Cubic Yards)
0	X	8.88	÷	52	÷	1	=	0.0

Per design standard the project must provide accommodation for future onsite recycling. Sufficient area shall be provided at the collection center to accommodate a minimum of two (2) containers or more, of equal capacity, with 1/2 of the total capacity used for refuse collection and 1/2 of the total capacity used for recycle collection.

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Step 3: Identification of Collection Method

Container Type (Compactors, Roll Off, Dumpsters, Carts)	Size (Cubic Yards)	Number of Containers	Number of Pickups Per Week	Material (Trash or Recycle)

Due to the complexity and difficulty in estimating future trash generation volumes, this report reflects the best efforts of the owner to represent the anticipated trash volumes based on use for the property. I certify that I have personally examined and am familiar with this information submitted in this form, I believe that the submitted information to be true, accurate and complete.

Authorized Signature (Owner or Owners
Rep)

Title

Date

Spotsylvania County Non Residential Waste Generation Report

The purpose of this report is to calculate the annual waste stream generated from a proposed project and to ensure adequate collection service is provided.

Step 1: Determination of Annual Waste Generation

Complete the table for the proposed project being submitted. In the column labeled "Floor Area" enter the amount of square feet being occupied by each use. Multiply each square footage figure by the corresponding value in the "Annual Waste Generation Rate" column, and then list the value in "Annual Tonnage" column. Add all values in the "Annual Tonnage" column and enter the total next to "Combined Annual Waste Stream."

Building Use	Floor Area (square feet)	Annual Waste Generation Rate (tons/sq ft)	Annual Waste Generation Rate (Tons)
Office		X 0.0013 =	0
Industrial		X 0.0016 =	0
Food/Retail		X 0.0057 =	0
Public Facility		X 0.00105 =	0
Institution/School		X 0.00105 =	0
Warehouse		X 0.00155 =	0
Combined Annual Waste Stream			0

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Step 2: Determination of Minimum Storage Capacity							
Determination of Minimum Storage Container and/or Dumpster Size (With Onsite Recycle Program)							
Combined Annual Waste Stream		Cubic Yards Per Ton		Number of Annual Collections <i>(Minimum 52)</i>		Number of Containers <i>(Minimum 2)</i>	Minimum Size of Each Storage Container or Dumpster (Cubic Yards)
0	X	4.44	÷	52	÷	2	= 0.0
Determination of Minimum Storage Container and/or Dumpster Size (Without Recycle Program)							
Combined Annual Waste Stream		Cubic Yards Per Ton		Number of Annual Collections <i>(Minimum 52)</i>		Number of Containers <i>(Minimum 1)</i>	Minimum Size of Each Storage Container or Dumpster (Cubic Yards)
0	X	4.44	÷	52	÷	1	= 0.0
Per design standard the project must provide accommodation for future onsite recycling. Sufficient area shall be provided at the collection center to accommodate a minimum of two (2) containers or more, of equal capacity, with 1/2 of the total capacity used for refuse collection and 1/2 of the total capacity used for recycle collection.							

Step 3: Identification of Collection Method				
Container Type (Compactors, Roll Off, Dumpsters, Carts)	Size (Cubic Yards)	Number of Containers	Number of Pickups Per Week	Material (Trash or Recycle)

Due to the complexity and difficulty in estimating future trash generation volumes, this report reflects the best efforts of the owner to represent the anticipated trash volumes based on use for the property. I certify that I have personally examined and am familiar with this information submitted in this form, I believe that the submitted information to be true, accurate and complete.

Authorized Signature (Owner or Owners Rep)
Title
Date