



Garbage 101

Let's talk trash. One of the things that we probably do every day is throw away garbage. The act is so common that it doesn't even register. We've all heard the cliché: "Out of sight, out of mind." Well, even when garbage is in sight, it seemingly passes under our eyes virtually unnoticed. But it's there. Then it's gone.

How much garbage do we make?

That question is not as simple to answer as it would seem. Just think of all the different sources – or generators – of garbage. You make garbage, right? And your family makes garbage. And schools, businesses, organizations and industries make garbage. Everybody makes garbage. And everybody makes different kinds of garbage.

Before reading any further, here's a term you need to know. What you call trash or garbage, professionals call solid waste. There are different kinds of solid waste, but one type measured nationwide by the U.S. Environmental Protection Agency (EPA) and in South Carolina is municipal solid waste (MSW).

What is MSW? MSW has many definitions throughout the nation. In South Carolina, however, MSW is defined as the combined residential, commercial, institutional/non-profit and industrial packaging/office waste that is generated. This includes paper, cans, bottles, food scraps, yard trimmings, packaging and other items. It does not include industrial process waste like scraps and by-products from the manufacturing process, construction and demolition (C&D) debris, automobile bodies, agricultural waste, combustion ash, mining waste and sewage sludge as well as hazardous, infectious and radioactive waste.

According to the S.C. Solid Waste Policy and Management Act of 1991 (Act), county governments are required to report annually to the S.C. Department of Health and Environmental Control (DHEC) the amount of MSW recycled within their county. Permitted solid waste facilities also are required to report the amount of waste disposed of at their facilities annually to DHEC.



And the number is ...

So, how much MSW did we make? South Carolinians generated about 4.18 million tons of MSW in fiscal year (FY) 2010 (July 1, 2009 - June 30, 2010) according to the S.C. Solid Waste Management Annual Report for FY10. The amount of MSW generated in (calendar year) 2009 (the latest numbers available) nationwide was 243 million tons according to the EPA.

How much MSW do we dispose of every day? South Carolinians disposed of 3.7 pounds of MSW per person per day (p/p/d) in FY10. By comparison, Americans discarded 2.9 p/p/d in 2009 according to the EPA.

Where does the garbage (MSW) go?

Of the 4.18 million tons of MSW generated in South Carolina in FY10, 1,063,521 tons or 25 percent of the state's MSW stream was recycled. Of the remaining amount, 3 million tons of MSW or 73 percent was disposed of in the state's 25 landfills that accepted MSW while 69,215 tons or 2 percent was sent to the state's only MSW incinerator, which is located in Charleston County.

There are other places MSW – which can be moved by truck, rail or barge – may go before being

disposed of in a landfill, sent to an incinerator or recycled. Some MSW is taken to a transfer station where it is compacted and loaded on large trailers. This is done usually when the community is a long distance from a landfill. Some MSW is taken to a recovered material processing facility where recyclables are sorted. The recyclables are taken to companies who process the materials and make them into new products while the garbage goes to a landfill or incinerator.

What's in our garbage?

The EPA calculates – by weight – what makes up the nation's MSW stream. In 2009, of the total MSW generated before recycling, paper and paperboard (which includes office paper, newspaper and cardboard boxes) was the largest category, comprising 28 percent or 68.4 million tons. Food scraps were second (14.1 percent or 34.3 million tons) followed by yard trimmings (13.7 percent or 33.2 million tons), plastic (12.3 percent or 29.8 million tons) and metal (including aluminum cans and steel cans – 8.6 percent or 20.9 million tons). Rubber, leather and textiles (8.3 percent or 20.2 million tons), wood (6.5 percent or 15.8 million tons) and glass (4.8 percent or 11.8 million tons) rounded out the top eight categories. The remaining amount (3.5 percent or 8.4 million tons) was classified as "other."

South Carolina measures the total MSW generated, but not the total amount of a specific waste category. To estimate how much of a specific category of material is being generated in South Carolina, we can use the national percentages determined by the EPA. There were 4.18 million tons of MSW generated

before recycling in South Carolina in FY10. That means that by using the EPA's figure of 28 percent of the total MSW generated being paper and paperboard products, South Carolinians generated an estimated 1.17 million tons of paper and paperboard products in its MSW waste stream. This is only an estimate, but should serve as a reasonable guide.

Other estimates of what South Carolinians generated before recycling include yard trimmings (572,233 tons), food scraps (588,941 tons), plastic (513,757 tons), metal (359,212 tons) and glass (200,491 tons). Again, these are estimates based on the EPA's national numbers.

Think before you throw ...

You know the three Rs – reduce, reuse and recycle. Waste reduction, which is making less garbage in the first place, is the preferred option of waste management. Reduction is followed by reuse, which means repairing items, donating them to a charity or selling them. Reuse is followed by recycling and composting – both of which turn materials that would become waste into valuable new resources.

Disposing of garbage at a landfill or burning it at an incinerator should be the last option for waste management. To learn more about garbage and ways you can reduce the amount you generate at home, at school and at work or more about recycling, composting and buying recycled, visit DHEC's Office of Solid Waste Reduction and Recycling Web site at www.scdhec.gov/recycle or call **1-800-768-7348**.



Office of Solid Waste
Reduction & Recycling
1-800-768-7348 ● www.scdhec.gov/recycle

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