



DHEC's Office of Solid Waste Reduction and Recycling

For Your Information...

Landfills

In an ideal world, we wouldn't throw anything away. We would reuse or recycle it.

In the real world, however, some things are thrown away and usually end up in a landfill.

All of us make solid waste – commonly known as trash or garbage. The waste we make is managed for us. How? What we don't reuse or recycle is sent to an incinerator or a landfill.

Just what is a landfill? A landfill is a large, outdoor site designed for the disposal of waste. There are different kinds of landfills that accept different material including municipal solid waste (MSW) – the trash and garbage that we throw away every day at home, work and school – as well as construction and demolition (C&D) debris, industrial waste, hazardous waste and land-clearing debris. For more information on how much we dispose of in landfills, see the "FYI: Garbage 101" fact sheet.

Landfills are a fact of life. Although waste reduction, reuse, recycling and composting divert large amounts of MSW from disposal, some waste still must be disposed of in landfills.

Landfills are not just holes in the ground.

Many years ago, there were few or no regulations regarding landfills. It showed. Many people remember smelly, unlined dumps that contaminated groundwater and caused other environmental problems. It's different today. Modern landfills are well-engineered facilities that must meet strict U.S. Environmental Protection Agency (EPA) and S.C. Department of Health and Environmental Control (DHEC) regulations that were established to protect human health and the environment. All landfills must be approved (receive a permit) from DHEC. When you think of it this way – and most of us don't – garbage disposal is no less an essential public service than police or fire protection.

Landfills that accept MSW must be built in suitable geological areas away from faults, wetlands, flood plains and other restricted areas. The design of landfills includes plastic liners and other materials like clay to prevent groundwater contamination. Monitoring is required to determine if there is any groundwater contamination. Daily



operation of landfills includes compacting (crushing) and covering waste with several inches of soil or other cover material to reduce odor and litter as well as control rodents and pests. Closed landfills must have a final cover that includes a synthetic cap and a soil layer. Once the landfill is closed, the responsibility of the landfill operator doesn't end. Landfill operators must set aside funding to provide environmental protection during and after the closing of a landfill. In short, today's landfills are expensive to design, build and maintain.

Beyond the expense, landfills also are difficult to build simply because the public frequently opposes new construction. People remember the poor practices of the past and are concerned about their health and environment as well as property values, noise, odor and traffic if a landfill is built near their community.

A Brief History of Landfills

Who invented the modern landfill? No one knows. Some experts say the British did in the 1920s. Others say there were "sanitary" landfills (landfills where the garbage is covered daily by some material) in the U.S. earlier than that, for example, in Champaign, Illinois in 1904.

This much is certain – wherever and whenever the first modern landfill was built and all those built afterwards, the drive to build them was public health. People realized

that open dumps were causing sickness in the community. "Sanitary" landfills gradually caught on in the 1930s, but got their biggest boost from the U.S. Army Corps of Engineers, which made sanitary landfills the disposal method of choice for military facilities during World War II. By 1945, about 100 American cities had "sanitary" landfills. Within 15 years, that number increased to about 1,400.

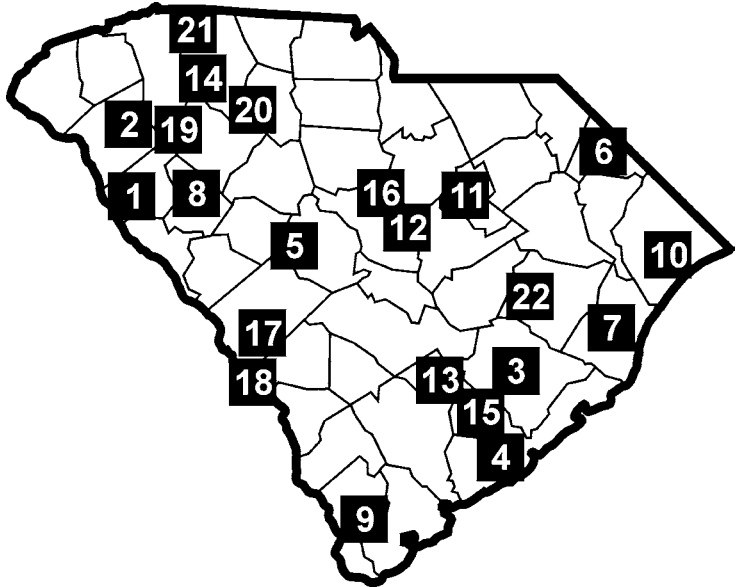
30, 2009). But what landfills lack in numbers is made up in size. Landfills are much bigger today than they were in the past. As such, today's landfills have a much longer lifespan and frequently accept waste from a much larger geographical area.

And what's going on today?

Nationwide, the number of active landfills has shrunk from nearly 8,000 in 1988 to 1,812 in 2008 according to the EPA. There are thousands of closed landfills. In South Carolina, there were 22 permitted landfills (that accepted MSW) operating in fiscal year 2009 (July 1, 2008 to June

Think before you throw.

For now, like them or not, there is a need for landfills. But each of us should do our part to reduce, reuse, recycle and compost whenever possible to save landfill space as well as natural resources and energy. For more information, visit DHEC's Office of Solid Waste Reduction and Recycling Web site at www.scdhec.gov/recycle or call 1-800-768-7348.

Permitted Landfills That Accept MSW*	
	<ol style="list-style-type: none"> 1. Abbeville County Landfill 2. Anderson Regional Landfill 3. Berkeley County Water & Sewer Authority Landfill 4. Charleston County Bees Ferry Landfill 5. CMC Landfill 6. Dillon Industrial Landfill 7. Georgetown County Landfill 8. Greenwood County Landfill 9. Hickory Hill Landfill 10. Horry County Solid Waste Authority Landfill 11. Lee County Landfill, LLC 12. Northeast Landfill, LLC 13. Oakridge Landfill 14. Palmetto Landfill 15. Pepperhill Landfill 16. Richland Landfill 17. SRS Z-Area Landfill 18. Three Rivers Solid Waste Authority Landfill 19. Twin Chimneys Landfill 20. Upstate Regional Landfill 21. Wellford Landfill 22. Williamsburg County Landfill
<p>SOURCE: "South Carolina Solid Waste Management Annual Report for Fiscal Year 2009"</p>	



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

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