



Pollution Reduction Strategy 4: Safe Management and Disposal of Solid and Hazardous Waste

Waste Management 101

Waste management and disposal activities include pollution prevention, recycling, cleanup, and disposal. A lack of waste management may lead to waste, even hazardous waste, being left on public and private property. Community responses to this waste management challenge could include buying equipment and planning ways to protect public health by managing solid and hazardous waste.

Waste management varies widely but generally has the following components:



Hazardous waste: Waste with properties that make it dangerous or capable of having a harmful effect on human health and/or the environment. Examples range from manufacturing and industrial waste to household items like drain cleaners.



Solid waste: Garbage, including liquids and gas materials, that has been discarded. Some examples of solid waste are discarded electronics, tires, single-use plastics, and other disposable items.



Waste management: Includes waste reduction, collection, treatment, storage, recycling, composting, and disposal.

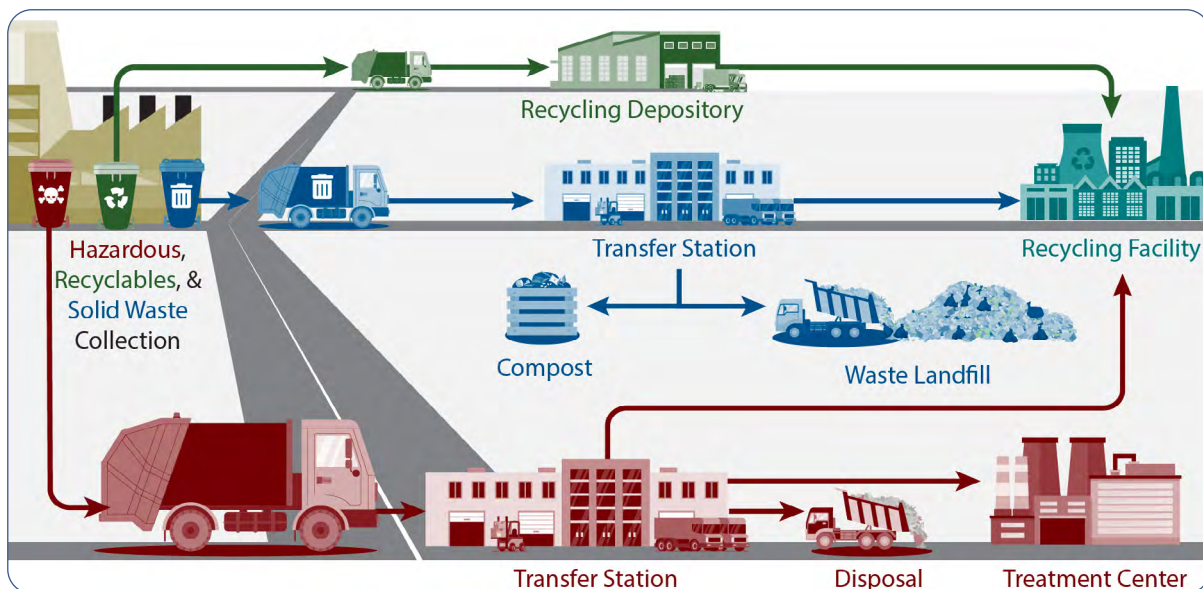


Diagram of waste management lifecycle

Safe Management and Disposal of Solid and Hazardous Waste

Waste Management Solutions for Community Challenges



Exposure to Toxic Substances and Hazardous Chemicals

Community Challenges	Possible Solutions
<p>The improper disposal of solid waste can expose people to toxins and hazardous chemicals.</p> <ul style="list-style-type: none">• Members of low-income and minority communities are more likely than high-income and white communities to reside in areas where waste has been illegally dumped or improperly stored. Exposure through air or water can cause health problems for residents• Solid waste disposal sites and hazardous waste sites such as Superfund sites are more likely to be located near low-income and minority communities than high-income and white communities.	<ul style="list-style-type: none">• Develop and improve waste management programs to collect, process, and dispose of hazardous waste. Consider adding waste disposal subsidies or incentives for priority populations.• Buy equipment for hazardous waste sampling to determine the type and potential danger of the waste.• Develop or expand safe disposal technologies for hazardous waste.• Fund lead paint removal and safe disposal programs to decrease exposure.



Release of Odors and Germs

Community Challenges	Possible Solutions
<p>Solid waste and its disposal sites can have strong odors or germs. Depending on the type of waste, the germs can cause diseases.</p> <ul style="list-style-type: none">• Low-income or unhoused individuals are more likely to reside in areas exposed to these smells and germs. These germs add to health risks to other burdens these individuals face.• Unhoused populations often have limited or no available bathrooms and go in areas that cause smells and the spread of germs.• Members of disadvantaged communities are more likely to live near Concentrated Animal Feeding Operations (CAFOs), which spread strong smells and waste to neighboring areas. This pollution can move into nearby water bodies and water supplies.	<ul style="list-style-type: none">• Review and improve the collection, processing, recycling, storage, and disposal of waste.• Create clean-up programs for existing sites to reduce smells and germs.• Develop educational programs about proper disposal methods and keeping the spread of germs to a minimum.• Build composting public bathrooms to reduce odors and germs while providing a green public service.• For areas near livestock farms or CAFOs, develop manure management strategies and technologies to reduce odors and emissions of gases like methane.

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Waste Management Solutions for Community Challenges



Residential Waste

Community Challenges	Possible Solutions
<ul style="list-style-type: none">• People with limited access to dish washing or clothes washing opportunities such as those with unstable housing may not have the resources to reduce their use of single-use disposable items.• Historically under-served neighborhoods or rural areas may not have facilities for proper disposal of used electronics and tires.• Many household products can be hazardous. Leftover quantities of these products can cause health problems in a community if the waste is improperly dumped in a way that exposes people to it.	<ul style="list-style-type: none">• Develop community composting options for food waste.• Reduce demand for single-use plastic products. One approach could be installing water fountains and public stations for refilling water bottles. Another approach could be setting up systems at a community scale or city scale for water container reusing and refilling.• Create or expand recycling programs to help reduce waste and reuse materials in new products made from recycled items.• Develop education and support programs to phase out single-use products that may be unnecessary. Promote replacement products, such as nontoxic cleaners, for common sources of household hazardous waste.

Disclaimer: This document was created to help Community Change Grant applicants think through various potential solutions to the problems their community may be facing. All the listed “Community Challenges” and “Possible Solutions” are only examples. We did not attempt to list all possible challenges or solutions.

For more information on solid and hazardous waste see EPA’s [Definition of Solid Waste](#) and [Learn the Basics of Hazardous Waste](#) pages.

For more information on the Safe Management and Disposal of Solid and Hazardous Waste, read Section I.G, Appendices C and F of the Notice of Funding Opportunity (NOFO).

For further questions regarding technical assistance, please contact EJ_TechAssist@epa.gov or call 1(800) 540-8123.

For questions regarding the Notice of Funding Opportunity (NOFO), please contact CCGP@epa.gov.



<http://bit.ly/CCGTA>