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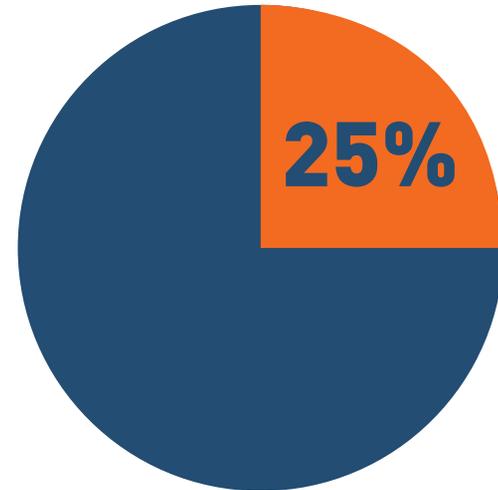
# 3 TIPS FOR HAZARDOUS WASTE SOURCE REDUCTION

## Executive Summary

This guide covers basic “source reduction” strategies to **prevent unused chemicals from becoming regulated as hazardous waste**. Minimizing the amount of hazardous waste your site generates can have tremendous benefits—from cost savings to decreased risk of spills, releases, and injury.

## According to the American Chemical Society (ACS), unused chemicals account for up to 25% of all collected waste.

Often, unused chemicals are regulated as hazardous waste when discarded under EPA's RCRA regulations. This leads to expensive management, shipping, and disposal costs—all for chemicals that were never used!



## What is source reduction?

Source reduction is the elimination of waste before it is created through design, manufacture, purchase, or use of materials and products in ways that reduce the volume of what is thrown away.



## Source Reduction Tip #1

### Improved communication

Not everyone at your site is an expert in the finer points of hazardous waste management. By improving communication between your purchasing department and your hazardous waste management team, you can prevent over-buying of chemicals.

- If possible, centralize purchasing for tighter control of site-wide inventory.
- Before purchasing chemicals, the hazardous waste division should assess the need to do so. Is there a safer or less toxic alternative? Can aqueous cleaners or low-VOC paints and coatings work for your processes?
- Educate buyers so they understand there is no such thing as a “large economy size” of chemicals. Bulk quantities may seem more economical, but the high cost of disposing of excess inventory will wipe out any initial savings—and even increase the actual total cost.



# Source Reduction Tip #2

## Smarter chemical management and storage

Taking time to plan and manage your storage and use of chemicals can go a long way towards preventing chemicals from expiring on the shelf. Smart inventory control can also help you avoid employee exposure to hazards—some chemicals become dangerously reactive or explosive as they age.

- Rotate inventory so the “first in” is also the “first out.” This will help eliminate the problem of expired chemicals.
- Barcode labeling and scanning systems can provide accurate data in real time.
- Institute a “just in time” purchasing mentality. Avoid stock-piling or purchasing by speculating what you might use. A computerized system will help you track what chemicals are used and exactly how much you already have on hand and/or need to order.
- Avoid end-of-budget-year buying sprees.



## Source Reduction Tip #3

### Creative alternatives to disposal

Is throwing your chemicals away your only option? Using some alternatives to disposal may keep chemicals around longer and result in less waste in the long run.

- Evaluate/test expired materials to determine if they can still be used.
- Consider creating a “haz-mart” to collect surplus chemicals from around the plant and make them accessible for alternative uses in lieu of bringing new chemicals on site.
- Find out if the chemical manufacturer has a buy-back or take-back program.
- Seek out potential users for your expired or unwanted chemical. Example: The local high school theater department could use your leftover paint to build its sets.

Storing excess and duplicate chemicals increases the risk of employee exposure, spills, releases to the environment, and fires and explosions. Proper inventory control can improve worker safety, be more protective of the environment, and ultimately improve your company’s bottom line.



## Advanced RCRA Hazardous Waste Training

Learn strategies to streamline compliance, minimize waste, and capitalize on exclusions and reliefs at the Advanced Hazardous Waste Management Workshop. This discussion-driven, one-day training is built for industry professionals who want to take their RCRA expertise to the next level.

**Save your seat now** for workshops coming to New Jersey, Pittsburgh, Houston, Dallas, Philadelphia, Orlando, Salt Lake City, Chicago, Detroit, and more in 2019–20.



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