

Hazardous Materials & Wastes

This tip sheet corresponds with Green Star Award Standard # 5 – Reduce the Use and Improve Management of Hazardous Materials and Wastes. Another useful tool is “Becoming a Green Star: A Waste Prevention Guide for Anchorage Businesses.”

You can find the guide online in pdf and html format at www.greenstarinc.org/guideindex.php or request a hard copy from Green Star.

What are Hazardous Materials and Wastes?

According to the Occupational Safety and Health Administration (OSHA), more than 30 million American workers are exposed to hazardous materials in their workplace. Hazardous materials are products that contain chemicals that have been identified as toxic to human health and/or the environment. Hazardous materials can range from office supplies to industrial solvents.

Some materials can be safely used with no adverse effects if used properly. Others can impact worker health if used regularly, even with proper safety precautions. Still other products may cause acute health effects with just one use.



A hazardous material may be radioactive, flammable, explosive, toxic, corrosive, biohazardous, an oxidizer, an asphyxiant, an allergen, or may have other characteristics that make it hazardous in specific circumstances.

Hazardous wastes are materials that are no longer needed or used for their intended purpose. Often an item may not be thought of as hazardous until it becomes a waste. For example, computers/electronics and fluorescent lamps all pose no threat during their useful life but can release numerous toxic chemicals if handled improperly during disposal.



Hazardous Materials in My Workplace?

Even in small offices one can find hazardous materials. From office supplies to cleaning and plant care products, there may be safer alternatives to the product you are currently using.

- Look at your office products to identify any older generation dry erase markers or white-out products. A strong odor often identifies the more toxic products. Buy the newer, second generation, markers and white-out tape to avoid the chemicals.
- Cleaning products often contain hazardous materials. Look for citrus-based and other less toxic varieties.
- Chemical pest control products also can be very toxic. Integrated pest management techniques, such as prevention, and mechanical and biological controls, can reduce your use of pesticides.
- Building-maintenance products such as lamps and ballasts, along with ice melt materials, can be dangerous. Managing these properly can minimize their impacts.
- In industrial shops, solvents, aerosols, degreasers, and metal cleaners all have toxic constituents. Less toxic alternatives are available for many.



Material Safety Data Sheets (MSDSs)

MSDSs are an important safety tool in the workplace. They can provide employees with vital information about the chemicals being used in their workplace.

Post MSDSs in a convenient and accessible location and let employees know where they are. Many employers routinely review MSDSs before they purchase a chemical, and compare it to acceptable alternatives in order to ensure the least hazardous material is used. This is one of the most important uses of such information since it prevents exposure in the first place.

MSDSs also are widely used to determine what protective measures should be implemented, such as what respirator to select to protect exposed employees or what type of glove material is required to prevent skin exposure.

How to Manage Hazardous Wastes

Once you have minimized your purchase and use of hazardous materials or waste-generating products, you may find you still generate some hazardous waste. Recycle what you can. Several hazardous wastes have reduced management requirements if they are going to a legitimate recycler rather than to a landfill.

U.S. EPA's universal waste regulations streamline hazardous waste management standards for federally designated "universal wastes," which include batteries, pesticides, mercury-containing equipment and lamps. Examples of common lamps that are classified as universal wastes include fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps.

If recycling is not possible, be sure to dispose of wastes responsibly. The Anchorage Landfill offers the Hazardous Waste Collection Center, where wastes are packaged, shipped, and disposed of safely. If still usable, some materials can be offered to others through the Reuse Program.



Mercury Everywhere!

When you think of mercury, do these applications come to mind? They should!

- art supplies
- barometers
- blood pressure cuffs
- button cell batteries
- chemistry sets
- computers
- cordless phones with a mute switch
- fluorescent lamps
- lamp ballasts
- gas stoves
- HID lamps
- microwave ovens (older models)
- old paint (pre-1990)
- pesticides
- products with thimersol such as antiseptic solution, contact solution and nasal spray
- seatbelts
- space heaters with auto shut-off
- thermometers (non-digital)
- thermostats (non-digital)
- tilt switches (silent switches used in many application in homes and autos)

Winter Hazards

Not all ice/snow melt products are the same - some are corrosive or damaging to aquatic life. Calcium chloride is recommended over sodium chloride (basic rock salt or road salt). It can be used in lower concentrations, it works at a lower temperature (-20°F to -25°F), and is less damaging to stream ecology. Calcium chloride can, however, cost about three to six times more than rock salt.

Visit www.greenstarinc.org/wintersurvival.php for a full comparison of snow melt products.

Resources

Universal Waste Rule

www.epa.gov/epaoswer/hazwaste/id/univwast/index.htm

Reducing Workplace Toxics

www.nyc.gov/html/nycwasteless/html/at_agencies/reducing_toxics.shtml

Total Reclaim, Inc. - recycles lamps, electronics, batteries, and refrigerant at Huffman Business Park 561-0544 or www.totalreclaim.com

Hazardous Waste Collection Center & Reuse Program Anchorage Regional Landfill - 428-1742 or 343-6262 www.muni.org/Departments/SWS/Pages/HazardousWaste.aspx

Integrated Pest Management (IPM)

www.schoolipm.info

Local Resources for Greener Cleaning Supplies:

Alaska Wellness Solutions (Shaklee)
770-5753
joanh@gci.net

Frontier Paper
1848 Ship Avenue
www.frontierpaper.com
272-4000

Waxie Sanitary Supply
Johnson Wax's Green Seal Certified products
4005 Spenard Road
www.waxie.com
800-478-6431

Ecolab's EcoLogic product line
317-4279



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