

Hazmat 101

If someone dumped a poisonous substance into a community's water supply, it would be considered a serious crime and could even lead to a public emergency notification. Yet, when someone dumps a hazardous material like paint thinner down the drain, a can of oil on the ground, or an old battery in a ditch, the impact on our environment, particularly our water resources, could be just as disastrous. Yet, no news flashes are issued.

Hazardous materials are substances that present a threat or potential risk of injury to people or the environment when they are produced, transported, used, or disposed of.

Hazardous materials have one or more of the following characteristics:

- **Toxic:** or poisonous; the material can cause death or injury through ingestion, inhalation or absorption through the skin
- **Flammable:** the material can easily ignite or catch on fire
- **Corrosive:** the material can eat away at objects or flesh because it is acidic or caustic
- **Reactive:** the material can mix with another substance and change into something completely different, often more hazardous than the original materials
- **Explosive:** the material can explode through sudden exposure to heat, pressure, or shock

Product labels may use any of those words or words such as caution, warning, danger or ignitable as signal words that the contents are harmful.

Effects of hazardous materials can range from minor irritations and allergies to chronic illnesses, cancers and death.

Every household contains hazardous materials, so it is necessary to understand how to use, store, and dispose of them properly. NEVER dispose of household hazardous materials by throwing them in the trash where they may explode, catch fire, or cause health accidents. NEVER dump them on the ground either where they can pollute the groundwater.

Then what should you do with hazardous materials you do not want anymore?

RCC for HHMs!

The Des Moines area is very fortunate to have access to the nationally-recognized Regional Collection Center (RCC) as a local facility providing safe disposal for Household Hazardous Materials (HHMs). Residents of an 18-county area in central Iowa may bring their HHMs to this state-of-the-art facility located just south of Bondurant. The facility is operated by Metro Waste Authority and is open Tuesdays - Fridays 1-5 p.m. and Saturdays 8 a.m.-12 p.m.

Residents may also visit the Swap Shop at the RCC to pick up FREE household materials others have dropped off. Items such as hobby glue, paint, rug cleaner, rust remover, fertilizer, pool chemicals, brake fluid and varnish are commonly available.

What types of items can you take to the RCC?

drain cleaner	metal polish	oven cleaner
disinfectants	toilet bowl cleaner	drain cleaners
oil-based paint	paint remover	paint thinner
cleaning fluids	epoxy	cement glue
wood preservatives	antifreeze	motor oil
auto batteries	gasoline	kerosene
fertilizer	pesticides	windshield washer
herbicides	rat poison	moth balls
photo chemicals	pool chemicals	button batteries
rechargeable batteries		

Give them a call at 967-5512

The 3 R's of Hazardous Materials

- Reduce** Buy only what you will use. You will not have a surplus, eliminating disposal worries. Whenever possible, use safer substitutes for cleaning, such as vinegar, baking soda and borax.
- Recycle** Take HHMs to the Regional Collection Center so they can recycle them in their Swap Shop or send it somewhere else to be recycled.
- Rethink** Before buying a product. Be sure you really need it and read the label to make sure the material will do what you want it to, then use it until it is gone. Visit the Swap Shop at the RCC to pick up products others did not want.

Household Hazardous Materials Activities

1. Sort the HHMs- Before class, gather common empty home product containers such as glass cleaner, bleach, shoe polish, oil, drain cleaner, pesticides, shampoo, ammonia, etc. Divide the class into groups and have each group make a list of the products they think would be considered hazardous materials and those that would not. Groups can share their results and tell how they came to their decisions. Lead into a discussion of hazardous materials' characteristics - toxic, flammable, explosive, corrosive or reactive. In their groups, have students now sort their HHMs according to those five categories and share results with the class.
2. Check out a super website about HHMs at www.purdue.edu/dp/envirosoft/housewaste/src/open.htm You will find a variety of activities, including a virtual house where students can click on rooms to find lists of common HHMs and also each product's health effects, storage tips, and proper disposal. You can find out how to make some alternative, environmentally-friendly cleaning products.