MANAGING HOUSEHOLD HAZARDOUS PRODUCTS

Chapter 6

Many of the products we use for housework or home improvements contain hazardous materials that can be harmful to the user or children in the house or may pollute the environment if not handled and stored properly.

These products give us more time to spend with our families and make our lives easier. We want to make sure these products are helpful to us and not harmful. To do this it is important to make sure they are used safely, stored properly and disposed of correctly.

Examine your activities that involve the use of hazardous products and make sure that you really need all the products you are purchasing. Carefully consider how to use the products safely, recycle or reuse them when possible. Dispose of used or remaining products in a way that will not pose a risk to surface water or groundwater. A few simple management principles apply in every situation.

How Do You Know If a Product is Hazardous?

Read the label. If a product contains a hazardous substance, the front label must include a warning and a description of the hazard. The label will also include instructions for safe handling and use, the common or chemical name and first aid instructions.

Remember T.R.I.C

A product is considered hazardous if it exhibits one or more of these properties:

- **Toxic** – capable of causing injury or death when swallowed, inhaled or absorbed through the skin. (Examples: insecticides, antifreeze, medicines)
- **Reactive** – is unstable and readily undergoes violent change; can react with air, water or other substances to explode or produce heat or toxic gases. (Examples: ammunition, peroxide, chlorine bleach)
- **Ignitable** – easily set on fire; capable of burning rapidly or a product with a flash point of less than 140° F. (Examples: paint, solvents, gasoline, nail polish remover)
- **Corrosive** – burns skin on contact and is capable of dissolving or breaking down other substances, particularly metals; has a pH below 2 or above 12.5. (Examples: some cleaners, lye, car battery) Try to avoid products that contain these words if at all possible.

Household Hazardous Waste Risk Assessment

Use the table below to rate your risks related to your management of household hazardous waste. For each question, check your risk level in the right-hand column. Some choices may not be exactly like your situation, so choose the response that fits best. Then look to the appropriate section for tips. **(See assessment table, next page)**

When buying household products:

- Read labels. Make sure the product will do what you want and that you feel safe using it.
- Select the least hazardous product.
- Buy only what you need if the product is not safe to store.
- Use products with pumps, not aerosols.
- Select water-based products rather than solvent-based products.
- Use products in containers made from recycled materials and/or that can be recycled.
- Look for those with the fewest warnings and cautions. A warning that advises washing hands after using a product probably indicates the product is potentially less harmful than one that warns users to wear goggles while using. Although a disinfectant cannot be labeled green, a consumer can pick one without fragrance or one with a trigger spray rather than an aerosol.

Assessment - Household Hazardous Products

	Low Risk	Medium Risk	High Risk	Your Risk
Household cleaners	Pay attention to warnings on labels before purchase and buy only what is needed. Try to dispose of these at a hazardous waste collection point.	Try to buy only what is needed. Dispose of these along with the regular trash. Stored in the most convenient place.	Buy in larger quantities to save money. Pour out what is not used in yard or storm drain. Stored within reach of children.	❒Low ❒Medium ❒High
Drain openers	Most often try to handle plugged drains with hot water, a plunger or a mechanical snake.	Usually use drain cleaners. Purchase only what is needed. Always stored in original container.	Try to keep a good supply of drain cleaner on hand. Purchase on the basis of the most powerful.	❒Low ❒Medium ❒High
Paints and solvents	Only buy what is needed for the job. If there is any leftover, try to share it with a friend or take to be recycled.	Try to use up the paint that is bought. If there is extra, store it in a safe area. Try to keep some solvents on hand, but they should be stored in a safe area.	Buy whatever size is cheapest. Store extra paint in the shed out back. Dispose of used solvents in the back yard or the storm drain.	❒Low ❒Medium ❒High
Automotive waste	Oil drips and fluid spills are cleaned up. Stormwater runoff does not come in contact with dirty car parts and vehicle wastes	Drips and spills are not cleaned up. Vehicle waste is left outside on paved areas.	Used oil, antifreeze, and other wastes are dumped in a ditch or on the ground. Vehicle leaks are not repaired or cleaned up.	❒Low ❒Medium ❒High
Handling pesticides and fertilizers	Spills are cleaned up immediately. Minimum amounts of chemicals are applied and in accordance with the label instructions. Applications are delayed to avoid rain.	Applications are not delayed to avoid rain.	Spills are not cleaned up. Products are used in greater amounts than recommended.	❒Low ❒Medium ❒High
Automotive washing	Cars and trucks are taken to a commercial car wash or spray booth.	Cars and trucks are washed on a lawn or gravel drive.	Cars and trucks are washed on a driveway, or other paved area.	❒Low ❒Medium ❒High
De-icing	Sand, road salts, and de-icers are not used to facilitate ice melt.	Sand is used to de-ice driveways and sidewalks. Salts and fertilizers are not used.	Fertilizers, salts, and sand are used to remove ice from driveways and sidewalks.	❒Low ❒Medium ❒High

- Seek those with third-party certification. Green Seal certified products and services can be found at greenseal.org/findaproduct/index.cfm. Products recognized by the Environmental Protection Agency's Design for the Environment Program are at www.epa.gov/opptintr/dfe/pubs/projects/formulat/formpartc.htm. Consumers also can look for independently verified products at Consumer Reports' www.GreenerChoices.org under "Eco-labels center."

Select less hazardous products whenever possible.

While Using Hazardous Household Products:

- Read and follow the directions.
- Wear protective clothing, if necessary.
- Make sure your work area is well ventilated.
- Seal products tightly before storage.
- Do not smoke, eat or drink when using these products.
- Be sure to warn children about the dangers of these products.

If Products Must Be Stored:

- Follow the directions for storage on the label.
- Protect the original label.
- Store hazardous household products in the original container.
- Keep metal containers dry to prevent corrosion.
- Store similar products together to reduce any danger from reactions if containers should leak or contents should spill.
- Store products away from children and pets.
- Store products away from any flammable materials or sources.

When Disposing of Hazardous Household Products:

- Do not mix products unless you are sure it is safe.
- Do not flush wastes down your sink or toilet.
- Never burn, dump or bury hazardous waste.
- Do not pour hazardous household waste into ditches, storm drains or gutters.
- DO RECYCLE products and containers whenever possible.

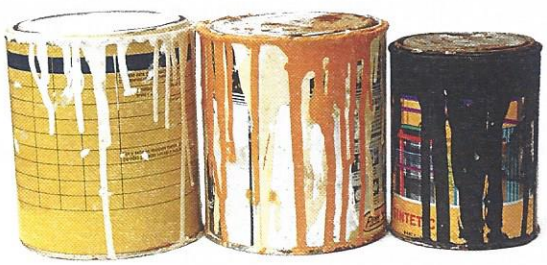
Keys to Reducing the Hazards of Household Products

- Pay attention to warning labels when purchas ing products. Select less hazardous products whenever possible.
- Use alternative products that are safer. Some of these may require a little more work than more hazardous products; however, they do not pose a disposal or storage problem like their more hazardous counterparts. A list of safer alterna tives is included at the end of this section.
- Purchase only what you need or reasonably expect to use. It may not really be saving money to purchase the large quantity if it ends up just sitting around the house for long time periods.
- Be aware of the dangers of the products you purchase and store these products safely.
- Products should be stored in their original con tainer.
- Try to use up the entire hazardous product pur chased or give it to someone else who can use it. This eliminates the disposal problem altogether.
- If a product must be disposed of, do so according to label directions.

Paints and Solvents

The best method for managing paint, solvents and cleaning products is to use them up. To avoid wasting any of these products, buy only the quantity that you need. Store them in well-ventilated areas, away from children and pets.

How Do You Store and Dispose of Your Paints and Solvents?



The best way to use up old paint is to find a painting project or give it to someone who will use it. Store paint in

a dry place where it won't freeze. Paint generally is usable if it mixes well when stirred and hasn't been frozen and thawed repeatedly. Paint can be recycled or put on the reuse shelf at your local household hazardous waste collection center. Any paint that needs to be disposed of should first be dried out in a well-ventilated area away from children, pets, flames or anything that might spark. For small quantities of paint, remove the lid and let it dry in the can. For larger quantities, find other uses for the paint by contacting service agencies, such as Habitat for Humanity, or your original paint dealer. After the paint has dried, it may be put out with your household trash.

Disposing of solvents by dumping them on the ground or in a storm drain can allow the solvents to move into the groundwater. Always use solvents in a ventilated area. Store them in the original containers and out of the reach of children.

How Do You Dispose of Your Hazardous Household Products?

Materials or products containing toxic or harmful substances should not be burned. It is illegal in the state of Arkansas to burn household garbage because of the potential air pollution. Burning can also contaminate the soil and water.

Household Hazardous Waste (HHW) collection centers and round ups provide a safe and environmentally sound means of disposal for certain unneeded household products. See www.adeq.state.ar.us/solwaste/branch_recycling/hhwcc for a list of Arkansas household hazardous waste collection centers. Somce facilities may require a fee.

The following items may be accepted:

- Automotive products (motor oils, oil filters, brake and transmission fluids and batteries)
- Paints, thinners, strippers
- Non-chlorinated solvents
- Household pesticides and herbicides (over-the-counter-products only)
- Fluorescent bulbs and ballasts
- Dry cell batteries
- Electronics

Automotive

Following a rainstorm, oil stains on your driveway and outdoor spills of antifreeze, brake fluid, and other automotive fluids are easily carried away by water runoff. If you see an oily sheen on runoff from your driveway, it is a sure sign that you need to be more careful. Routine maintenance can prevent your car from leaking and help identify potential leaks. If you change your own oil, be careful to avoid spills and collect the waste oil for recycling. Used oil or other automotive fluid, if dumped down a storm drain or on the ground, may end up in your drinking water or the lake.

Safe Handling of Chemicals

Safe storage of chemicals is very important, but so is safe handling. When mixing chemicals, try to do it in a confined area such as a washtub; this way any spills are contained. Be sure to read labels carefully before mixing chemicals together. If you spill chemicals, act quickly to contain them and clean up the spill.

Lawn and Garden

The timing of the application of chemicals in yards, gardens, and landscapes is very important. Do not apply pesticides and chemicals if rain is expected within 24 hours. Besides being uneconomical, application just before rain almost guarantees pollutant runoff. Also, follow application rates for your soil, which should be listed on the product label. If you exceed recommended rates, the excess chemicals may run off. Contact your local office of the Cooperative Extension Service to learn about soil testing procedures and tests that are available.

De-icing

While snow in Arkansas can be sporadic, some people will use road salt and other de-icers on their driveways and sidewalks. Road salt and de-icers eventually wash off paved surfaces and end up in the soil or water. Stormwater readily carries salt and chemicals into nearby estuaries and rivers. Salt harms wildlife and plants in high concentrations, so use as little salt as possible. Refrain from using fertilizers as de-icers; sand is a less toxic alternative. Chipping ice off pavement is an even better choice, although care must be taken not to damage the pavement surface.

Cleaning Product Alternatives

Several types of cleaning jobs can be accomplished using safe products commonly found around the house. These include:

Linoleum Floor Cleaner - vinegar and water
Mop with a mixture of ½ cup vinegar in a bucket of warm water. The vinegar odor will go away shortly after the floor dries.

All-Purpose Cleaner - ammonia and liquid detergent, water. Mix 2 tablespoons ammonia, 2 tablespoons liquid detergent, 1 quart water (Do not use liquid detergent with bleach added!)

Drain Cleaner -baking soda, vinegar, boiling water. This recipe will free minor clogs and helps prevent future clogs. Pour ½ cup of baking soda down the drain first, then ½ cup vinegar. Let it fizz for a few minutes. Then pour down a tea kettle full of boiling water. Repeat if needed. If the clog is stubborn, use a plunger. If very stubborn, use a mechanical snake.

Oven Cleaner - baking soda and water. Mix 1 cup of baking soda with just enough water to make a paste. Apply to oven surfaces, and let stand for a little while. Use the scouring pad for scrubbing most surfaces. A spatula or bread knife is effective to get under large food deposits. This recipe will require a little elbow grease, but it is not toxic to you or a child. Try spot cleaning your oven regularly. A dirty oven is less energy-efficient. Do not use this cleaner on self-cleaning ovens.

Tub and Sink Cleaner - baking soda, liquid castile soap. You can use baking soda in place of your scouring powder. Sprinkle it on porcelain fixtures and rub with a wet rag. Add a little soap to the rag for more cleaning power. Rinse well to avoid leaving a hazy film.

Toilet Bowl Cleaner - baking soda, liquid castile soap. Sprinkle baking soda inside the bowl as you would any scouring powder. Squeeze a couple of drops of soap in also. Scrub with a toilet bowl brush and finish outside surfaces with a rag sprinkled with baking soda.

Window and Mirror Cleaner - Vinegar and water, or lemon juice and water Put ¼ cup vinegar in a spray bottle and fill to top with water. Spray on surface. Rub with a cloth diaper, other lint-free rag or sheets of newspaper. For outdoor windows use a sponge and wash with warm water with a few drops of liquid castile soap in it. Rinse well and squeegee dry.

Stain Removers

- Perspiration stains from cloth. White vinegar, lemon juice and water.
- Cola and chocolate stains from cloth. Soak in club soda.
- Blood stains from clothes – hydrogen peroxide.
- Pet stains, non-oily stains from carpet. White vinegar.
- Soot stains, black heel marks - baking soda
- Rust stains - cover spot with salt or baking soda, then rub with peeled potato.

Other Alternatives

- Club soda - Use as wax remover, chrome and floor polish remover.
- Toothpaste - Use to remove crayon marks or to remove discoloration around tub and sink fixtures.
- White vinegar - Removes adhesives (decals in tubs, stick-on hooks, price tags, wall hangers) from glass, wood, china and windshields. Use as final laundry rinse and fluff. Use as lime and mineral remover.

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