Managing Hazardous Household Products

Many products that people commonly use in their everyday activities can harm people and can cause pollution. This worksheet provides information about proper storage and disposal practices for these types of products. You can assess your current practices and develop an action plan to minimize health hazards and water pollution risks.

Identify hazardous products at home
Household products are hazardous if they include ingredients that might pose dangers to human health or the environment. Not every product is equally hazardous—for example, some paint and strippers are less hazardous than others.

The first thing to do is to read the label. The label will help you identify the correct product to meet your needs. It will also provide information on the relative toxicity of the product. Guide-words on the label tell you how dangerous a product is: products labeled CAUTION have relatively low toxicity; products labeled WARNING have moderate toxicity; products labeled DANGER have high toxicity.

The precautions you need to take will depend on the individual product and its toxicity. Make sure that you can use the product safely before you purchase it. The label also contains information on first aid.

If you need more information about a product than the label provides, you may request a Material Safety Data Sheet (MSDS) from the manufacturer. Their phone number is often on their product label. If there is an emergency, or you need more information, call the Poison Control Center (see Contacts). If you have small children in your home, you may want to write the number of the poison control center on or near your phone.

Choosing products
You can control the degree of hazard you bring to your home or property. When choosing from among several brands of a product, read the labels to learn which will meet your needs most safely. There also may be other less hazardous choices to some commercial products. HAPPI-Home 6, Alternatives to hazardous household products, lists some of these. Additional information can be found on the Web; for example, see <http://foe.org/eday99/cleaners.html> and <http://www.ecomall.com/greenshopping/mtngreen.htm>.

If you buy more than you need, household products can create storage problems. If unused for long periods, product containers may leak. Also, some products may change and not be effective when you use them. Some pesticide products may have been banned since they were purchased. If that occurs, disposal becomes more difficult. Avoid these problems by purchasing and using only what you need.

Storage
The primary storage concerns are child safety, indoor air quality, and prevention of damage to household equipment or the environment. If you can smell a household product while it is not in use, you may have a problem. Keep the following in mind when storing household products:

- Keep them out of the reach of children and pets, preferably in a locked, secure area.
- Store them in their original containers with the label and a date.
• Always store fuels in approved fuel containers.
• Keep containers tightly sealed and dry.
• Store products at least 150 ft from a well or waterway.
• Keep products in a well ventilated area and away from sources of ignition like a gas stove or water heater.
• Store batteries and flammable chemicals in an area shaded from direct sunlight.
• Separate corrosives like acids or lye to prevent chemical reactions.

Routine check storage areas to make sure that containers are closed tightly and not leaking and that the sides of containers are not bulging. Storage areas should have a floor made of concrete or another impermeable surface and should be well ventilated. If you regularly store large amounts of fuel, consider installing an above-ground tank.

Disposal
Unless a product is used up, you will have to dispose of it. Even the product container may have to be disposed of carefully. Disposal can be costly and, if not done properly, can be unsafe for you and the environment. You can avoid disposal by buying and using only what you need, using leftovers, or recycling.

Disposing of potentially hazardous products, especially in or near streams or other water bodies, can cause pollution. Even empty containers can be a source of pollution, if water enters and carries the chemical away. Containers should be rinsed at least three times (“triple-rinsed”), and the rinse water should be used in the same way as the chemical itself. Then the container should be punctured. Burning potentially hazardous products is also not advised, because some items (e.g., aerosol cans) may explode and others may release toxic fumes.

HAPPI-Home 5, Think before you dump it: Safe disposal of hazardous household products, contains additional information on how to safely dispose of a wide range of common farm and household chemicals. Information is also available from the City and County of Honolulu Department of Environmental Services (see Contacts). These resources only provide general disposal information on types of products. Read the product label for specific instructions for any particular product. County hazardous waste offices and the Solid and Hazardous Waste Branch of the Hawaii Department of Health (see Contacts) also can provide additional information.

Recycling is an even better option for many products including used motor oil and antifreeze, solvents like paint thinner and turpentine, and automotive batteries. Not all products can be recycled on every island. Check with your county recycling program (see Contacts) for additional information about what can be recycled in your county and where it can be recycled. HAPPI-Home 14, Yard and garden pest management, provides additional information on proper use, storage, and disposal of yard and garden pesticides.

Assessing your risks
Your next step is to assess the your pollution risks. Complete the table on page 3 by selecting the practices that best describe what you do. If the category does not apply, leave it blank.

Contacts
For more information on the safest way to dispose of hazardous household products, contact the Office of Solid Waste Management in the Hawaii State Department of Health at the following telephone numbers:

Hawaii ........................................ 974-4000 ext. 64226
Maui ........................................ 984-2400 ext. 64226
Kauai ....................................... 274-3141 ext. 64226
Molokai and Lanai .... 1-800-468-4644 ext. 64226
Oahu ......................................................... 586-4226

Poison Control Center: 941-4411 (Oahu) or 1-800-362-3585 (neighbor islands)

Additional county-specific information is available from your local county hazardous waste management office:

Oahu: City and County of Honolulu Department of Environmental Services, 523-4774, or on the Web at <http://www.opala.org>

Maui, Molokai, Lanai: Maui County Department of Public Works, 270-7880; locations and hours for used oil recycling on the web at <http://www.mauin.net/ ~recyclemaui>

Hawaii: Hawaii County Solid Waste Office, 961-8339 for disposal information; Recycle Hawaii, 329-2886 or 961-2676, or on the web at <http://www. recyclehawaii.org/what.htm> for recycling information

Kauai: Kauai County Solid Waste Office, 241-6880
## Risk Assessment Table for Hazardous Household Products

<table>
<thead>
<tr>
<th>Low risk</th>
<th>Moderate risk</th>
<th>High risk</th>
<th>Your risk</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product selection</strong></td>
<td>I always read labels and respect the health or environmental hazards labels describe; I choose the least hazardous product needed for the job</td>
<td>I sometimes don’t read labels or don’t understand what they mean, but I use a “common sense” approach to safety</td>
<td>I seldom read labels; I purchase products first and later on consider what the product is made of and how it will be used</td>
</tr>
<tr>
<td><strong>Quantities purchased</strong></td>
<td>I buy only what is needed for a specific job; I use up most of the product within a few months of purchase</td>
<td>I buy excess product, but provide safe and accessible storage</td>
<td>I buy more than is needed, then purchase additional product without checking on current supplies</td>
</tr>
<tr>
<td><strong>Safety precautions</strong></td>
<td>I follow label instructions and take recommended precautions against exposure (such as providing good ventilation and wearing safety goggles and gloves)</td>
<td>I occasionally read label instructions; I take some precautions</td>
<td>I seldom follow label instructions and take no precautions, even when recommended</td>
</tr>
<tr>
<td><strong>Child safety</strong></td>
<td>I store hazardous products in a locked cabinet or other location inaccessible to children</td>
<td>I keep products out of the direct reach of children (e.g., on a high shelf) but still accessible</td>
<td>My products are easily accessible to children (for example, in an unlocked cabinet on the lower shelf)</td>
</tr>
<tr>
<td><strong>Containers, storage location, and spill protection</strong></td>
<td>I store leftovers in their original containers, properly sealed; products are stored by type; my home environment is protected against leaks or spills</td>
<td>I store original containers in a disorganized way; I don’t provide protection against leaks or spills</td>
<td>I transfer leftovers to other containers such as used milk jugs or glass jars; I store leftovers without caps or lids; I don’t provide protection against leaks or spills</td>
</tr>
<tr>
<td><strong>Ventilation</strong></td>
<td>I store volatile products (such as solvents and petroleum-based fluids) in places with good ventilation</td>
<td>I don’t pay attention to storage location, but each container is in good shape and tightly sealed</td>
<td>I store products in areas with poor ventilation, such as basements, closets, or crawl spaces; some containers are damaged or left open</td>
</tr>
<tr>
<td><strong>Hazardous household products</strong></td>
<td>I use up products when possible; I dispose of leftover products according to label directions; I take leftover products containing mercury, pesticides, or hazardous solvents to a hazardous waste disposal program</td>
<td>I dispose of all leftover products in a community landfill</td>
<td>I always dump leftover products; I dump leftovers in or near a stream or waterway <em>(NOTE: this is illegal!)</em></td>
</tr>
</tbody>
</table>
Your action plan
Now that you have assessed your management practices, you can take action to change practices that may create household hazards. For areas that you identified as high or moderate risk, decide what action you need to take and fill out the Action Plan below.

<table>
<thead>
<tr>
<th>Write down all your moderate-risk and high-risk activities below</th>
<th>What can you do to reduce the potential hazard risk for your home?</th>
<th>Set a target date for action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samples of action items:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cabinet with antifreeze and paint stripper is not child-proof</td>
<td>Buy a lock and install it on cabinet</td>
<td>One week from today</td>
</tr>
</tbody>
</table>

Mention of a trademark, company, or proprietary name does not constitute an endorsement, guarantee, or warranty by the University of Hawaii Cooperative Extension Service or its employees and does not imply recommendation to the exclusion of other suitable products or companies.

This HAPPI document was adapted by Michael Robotham, Carl Evensen, and Linda J. Cox from Managing hazardous household products by Elaine Andrews, Chapter 5, pp. 47–60, in Home•A•Syst: An environmental risk assessment guide for the home, developed by the National Farm•A•Syst/Home•A•Syst Program in cooperation with NRAES, the Northeast Regional Agricultural Engineering Service. Additional graphics are taken from Protecting Your Resources Through a Farm and Home Assessment. Permission to use these materials was granted by the National Farm•A•Syst/Home•A•Syst Office. HAPPI-Home materials are produced by the Hawaii’s Pollution Prevention Information (HAPPI) project (Farm•A•Syst/Home•A•Syst for Hawaii) of the University of Hawaii College of Tropical Agriculture and Human Resources (UH-CTAHR) and the USDA Cooperative Extension Service (USDA-CES). Funding for the program is provided by a U.S. EPA 319(h) grant administered by the Hawaii State Department of Health.