

# Pesticide Storage, Safety and Disposal

Suzanne Smith Hirrel  
Extension Specialist/  
Associate Professor -  
Environmental  
Management

Billie Majors  
County Extension Agent -  
4-H

No matter how well agricultural producers calculate their pesticide needs, there is always the possibility they will end up with chemicals that cannot be used. The most common reasons for these unusable pesticides are lost labels, registration cancellation and exposure to extreme cold or heat.

While it is not illegal to possess canceled or unusable pesticides if properly stored, it is often illegal to use canceled pesticides. Caution should be taken with these chemicals, or users may be subject to fines and/or cleanup costs if containers leak and contaminate soil, water or other resources.

The Arkansas State Plant Board, with support from the Arkansas Natural Resource Commission, the University of Arkansas Division of Agriculture Cooperative Extension Service and the Arkansas Farm Bureau, have piloted a program to help Arkansas farmers dispose of unwanted pesticides at no cost. In 2006 and 2007, the Abandoned Pesticide Trust Fund funded collection events in nine counties. These events collected and

disposed of 231,712 pounds of unwanted and unusable pesticides.

This program is open to all agricultural producers and landowners free of charge. Commercial pesticide applicators and dealers do not qualify for the program.

Funding for this program comes from pesticide registration fees paid by chemical manufacturers. However, funding is limited, so the program has not yet been offered statewide. Counties with large agricultural production are being targeted first for collection events.

Waste pesticides are collected by licensed hazardous waste professionals and disposed of in licensed hazardous waste incinerators or landfills.

## Guidelines for Safely Storing and Disposing of Waste Pesticides

Take an inventory of all waste pesticides. A sample inventory form is in this fact sheet or can be obtained from [www.uaex.edu](http://www.uaex.edu) or from your

Accepted Materials	Materials Not Accepted
<p>Pesticides will be accepted in any containers:</p> <ul style="list-style-type: none"> <li>• Pesticides</li> <li>• Pesticide mixes</li> <li>• Unknown pesticides</li> <li>• Metal pesticide containers</li> </ul>	<p>Any non-pesticide material such as:</p> <ul style="list-style-type: none"> <li>• Explosive or ordnance materials</li> <li>• Radioactive materials</li> <li>• Household chemicals</li> <li>• Petroleum products</li> <li>• Medical wastes</li> <li>• Fertilizers</li> <li>• Solvents</li> <li>• Paints</li> </ul>

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county Extension office. Make sure to look in out-of-the-way storage areas where chemicals could be misplaced or forgotten. If labels are available, they should stay with the appropriate pesticide container. This will help the hazardous waste contractor determine the toxicity, transportability and the estimated cost of collection. If the pesticide cannot be identified, label the container "Unknown Pesticide."

When going over the inventory, make a note of the condition of the waste pesticide containers. Metal and plastic containers should be inspected for rust or brittle areas and leaks along container seams. An outer packing or over-packing of storage drums, with lids, should be used for leaking containers. To absorb any leakage from damaged containers, cat litter or any other absorbent material can be placed on the spill as well as in the bottom of the drums.



Paper containers are easily torn and very sensitive to moisture. Heavy-duty trash bags can be used to contain dry pesticides. Be sure to label all over-packing to warn against opening the containers.

Prior to collection, be sure waste pesticides are stored away

from any usable pesticides. All employees should be notified of the waste pesticides' location and instructed not to use them.

All pesticides, including waste pesticides, should be locked securely to prevent unauthorized access. Signs should be posted clearly stating there are pesticides inside.



Always wear personal protective equipment (PPE) when handling pesticides and waste pesticides. The best source for information concerning proper



safety precautions is the label on the container. If no label is present, handle the chemical as if it is highly toxic.

Prior to a collection, producers must turn in inventory forms to the local Farm Bureau office. The inventory form assures that the hazardous waste contractor will have adequate resources, storage, transportation and funding available for a safe collection. Any participants needing assistance with disposal can make a request for over-packing. In some instances, the contractor may choose to go to the waste pesticide storage site.

The Farm Bureau will contact those needing assistance to offer further instructions. Identifying information is separated from the inventory portion of the form to provide as much anonymity as possible.

The safest way to transport any pesticides is in the back of a truck or on a trailer and never in the passenger compartment. If using a flatbed truck or trailer, it should have side and tail racks. What is the old saying? "Most traffic accidents happen within five miles of the house." Even when traveling a short distance, have all containers properly secured. Nonporous beds are preferred; insert a liner before loading pesticides. Plastic sheeting can be used to contain any spillage that might occur and simplifies any cleanup and decontamination. Also, a tarp should be used to protect paper and cardboard containers from moisture.

Most collection events are held from 8 a.m. to noon with locations selected for convenience. When taking waste pesticides to a collection event, the producer is responsible for any spillage that occurs before the wastes arrive at the collection site. At the collection site, proceed to the appropriate line as directed. Materials will be unloaded by the hazardous waste contractor.

## AGRICULTURAL PESTICIDE INVENTORY FORM

This form is a management tool to help keep track of pesticides stored on the farm. Make sure to look in out-of-the-way storage areas where chemicals could be misplaced or forgotten. If labels are available, they should stay with the appropriate pesticide container.

NAME/FARM: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ CITY: \_\_\_\_\_ ZIP: \_\_\_\_\_

STORAGE LOCATION: \_\_\_\_\_ DATE: \_\_\_\_\_

Please list the pesticides that you have stored on your farm.

	NAME OF CHEMICAL (if unknown, please list as "unknown" or mixed; please list all that are together). <b>Note: DO NOT MIX CHEMICALS</b>	TYPE OF FORMULATION (solid, liquid or aerosol)	TYPE OF CONTAINER (metal, plastic, glass, paper or cardboard)	SIZE OF CONTAINER or PRODUCT (gallons or pounds)	NUMBER OF CONTAINERS	CONDITION OF CONTAINERS (Check appropriate description)			ESTIMATED TOTAL QUANTITY OF WASTE (gallons or pounds)
						Good, Stable Container	Unstable Container (not leaking)	Deteriorating Unstable Container (leaking)	
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

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# Pesticide Transportation Checklist

<p><b>Cab Interior</b></p> <p><input type="checkbox"/> Extra change of clothes</p> <p><input type="checkbox"/> Post emergency phone numbers: Poison Center: 1-800-222-1222 Chemical Emergencies: 1-501-374-1201</p> <p><input type="checkbox"/> Farm owners/operators emergency phone number _____ (fill in)</p> <p><input type="checkbox"/> Record of on-board pesticides in case of accident (copy of Inventory Form)</p> <p><input type="checkbox"/> Labels (if available)</p> <p><input type="checkbox"/> First aid kit</p> <p><input type="checkbox"/> Pesticides not stored in cab</p> <p><b>On-board Pesticide Containers</b></p> <p><input type="checkbox"/> Containers properly sealed and secured</p> <p><input type="checkbox"/> Legible labels on all containers</p> <p><input type="checkbox"/> Pesticides kept in original containers</p> <p><input type="checkbox"/> Over-packing used</p> <p><input type="checkbox"/> Containers securely restrained for transport</p>	<p><b>Spill Control</b></p> <p><input type="checkbox"/> Absorbent materials and rags on board.</p> <p><input type="checkbox"/> Shovel, broom, plastic bags on board</p> <p><input type="checkbox"/> Hazardous materials spill kit</p> <p><b>Equipment Check</b></p> <p><input type="checkbox"/> Supplies in moisture-proof containers</p> <p><input type="checkbox"/> Lids fit securely on pesticide tanks</p> <p><b>Personal Protective Equipment (PPE)</b></p> <p><input type="checkbox"/> Goggles or other eye protection</p> <p><input type="checkbox"/> Chemical-resistant gloves</p> <p><input type="checkbox"/> Waterproof boots, apron, hat – if required by label</p> <p><input type="checkbox"/> Respirator – chemical cartridge or dust/mist</p> <p><input type="checkbox"/> Other – as directed by the label</p> <p>THESE ARE SUGGESTIONS. ALWAYS READ THE LABEL TO DETERMINE PPE REQUIREMENTS!</p>
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<i>Vehicle ID:</i>	<i>Notes:</i>
<i>Inspected by:</i>	
<i>Date:</i>	

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**SUZANNE SMITH HIRREL** is Extension specialist/associate professor - environmental management in Little Rock and **BILLIE MAJORS** is Baxter County Extension agent - 4-H in Mountain Home. They are with the University of Arkansas Division of Agriculture, Cooperative Extension Service.

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