

Cooperative Extension Service



Pesticide Container Disposal

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

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Pesticides (herbicides, fungicides, insecticides, etc.) are by nature toxic because they control, destroy, or prevent pests. The more toxic pesticides can produce substantial adverse effects, even in very small quantities, on sensitive organisms in the environment.

Improper disposal of pesticides or their containers can lead to environmental contamination/degradation and may incur both civil and criminal penalties. Applying pesticides according to the label directions and buying only what is needed can eliminate many potential environmental and disposal problems.

Canceled or unlabeled pesticide products pose special problems because legal uses are nonexistent or extremely limited, and there is usually no economical way to dispose of these type pesticides. Disposal should be left to hazardous waste handling professionals. When purchasing or using pesticides remember to:

- Never buy more pesticide product than can be used in a single year
- Use all of the chemical on registered sites or crops according to label directions.
- Keep pesticides in their original containers.

The disposal of empty pesticide containers can be greatly simplified if certain rinsing procedures are followed.

The Environmental Protection Agency (EPA) has accepted certain procedures which are designed to remove as much residue from the container as possible. Only after following

these procedures may pesticide containers be deposited in a licensed landfill. Usually, the only way to dispose of pesticide containers not properly treated is to contract with a firm that handles hazardous waste – a very expensive alternative. Since there is no hazardous waste landfill in Arkansas, transportation costs for the contaminated containers will push the disposal costs even higher.

Rinsing Pesticide Containers

The proper rinsing of empty pesticide containers is a requirement of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). Properly rinsed pesticide containers are considered nonhazardous solid waste by the Federal Resource Conservation and Recovery Act (RCRA), and the Arkansas Department of Pollution Control and Ecology.

Proper rinsing saves money and protects people and the environment, especially groundwater. Rinsing of pesticide containers is important to make containers a nonhazardous solid waste, and ensure that all of the pesticide, including that in the rinsate, is used on the target. Rinsate from containers should be added to the sprayer tank and applied according to label directions.

The proper rinse procedure requires that you plan ahead!

- Read and follow all label directions!
- Wear the appropriate protective clothing and equipment.

- Rinse containers **immediately** after emptying because some pesticides will dry or solidify quickly and become difficult to remove.
- Consider the volume of the rinsate when filling the sprayer tank. Either leave enough room in the sprayer tank to accommodate the rinsate, or finish filling the tank after adding the pesticide and the container rinsate to the tank.
- Have back-flow protection on your water supply line when filling the sprayer tank and rinsing the container to prevent pesticide from siphoning back into your water source.

There are two acceptable ways to rinse empty pesticide containers:

- **Triple-rinsing.**
- **Pressure-rinsing.** Use a device specifically manufactured to wash container interiors.

How to Triple-Rinse Containers

1. Drain the empty pesticide container into the sprayer tank for at least 30 seconds.
2. Fill the container one-quarter full of clean water. Replace the cap securely and shake, roll and swirl the contents vigorously for **at least thirty (30) seconds**. Rinse all surfaces! Remove the container cap and empty rinsate into the spray tank. Allow the container to drain for at least 30 seconds.
3. Repeat the fill, shake and drain procedure two (2) more times, using clean water each time.
4. Properly dispose of the rinsed containers and caps as soon as possible.
5. Plastic and plastic-lined bags can be triple-rinsed. For paper and fiber bags and similar containers, completely empty the contents into the tank. Open both ends of the container to remove any remaining pesticide and to prevent reuse.

How to Pressure-Rinse Containers

1. Drain the empty pesticide container into the sprayer tank for at least 30 seconds.
2. Hold the container upside down over the sprayer tank opening so that rinsate will run into the sprayer tank.

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For ease and safety, puncture through the bottom of metal containers and through the side of plastic containers with appropriate tool or pressure-rinsing nozzle. **Follow specific manufacturer directions.**

3. Thoroughly rinse the empty container for the time interval recommended by the pressure-rinse nozzle manufacturer, but no less than 30 seconds.
4. Properly dispose of the rinsed containers and caps as soon as possible.

Disposal of Properly Rinsed Pesticide Containers

Landfill Disposal

Once the empty pesticide containers are properly rinsed they are considered nonhazardous solid waste and may be disposed of in a licensed landfill.

Licensed landfills do not have to accept pesticide containers. Check with the landfill operator to make sure they will accept properly rinsed pesticide containers.

Disposal By Recycling

Properly rinsed plastic pesticide containers can be recycled to make new pesticide containers or other plastic products. Since the containers are bulky, the first step is to reduce the volume of the containers so they can be transported to a site for further processing. To reduce the volume of the plastic containers they are fed through a shredding machine which grinds them into very small pieces.

Presently there are very few shredding machines in Arkansas. An FFA chapter in Greene County purchased a mobile shredder to use in northwest Arkansas. More shredders are needed to handle the volume of containers generated by Arkansas farmers.

Please contact your county Extension agent and/or other farm organizations to express your interest in recycling plastic pesticide containers. Your help is needed to make this program available statewide.

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