



## Pesticide Container Disposal and Recycling

by Jim Wilson, Extension pesticide applicator trainer

### Why Rinse?

Each year many pesticide containers are emptied in South Dakota. **Law requires that you properly rinse containers before you dispose of or recycle them.** Rinsing your pesticide containers also provides additional benefits such as:

- Saving money by allowing you to use the pesticide remaining in the container.
- Reducing the potential for ground and surface water contamination.
- Allowing the containers to be recycled or landfilled.

### Proper Rinsing

Rinse containers immediately after emptying. This makes it easier to remove the remaining pesticide. If you store containers until the end of the spraying season, it may be very difficult to clean them sufficiently.

**Since rinsing containers is mandated by law, the pesticide label will give directions for the proper rinsing procedure.**

There generally are two accepted methods: triple rinsing and pressure rinsing.

---

**Remember -- always wear proper, protective clothing when rinsing pesticide containers.**

---

### To triple rinse a container:

1. Empty the container and let it drain into the sprayer for 30 seconds.
2. Fill the empty container about 1/5 full of water and replace the cap securely.
3. Shake adequately to rinse all areas of container. Pay special attention to the hollow handle on most containers.
4. Pour the rinsate into the sprayer, and let it drain for 30 seconds.

5. Repeat steps 2-4 twice more.

6. Inspect the container. If there is pesticide residue remaining, continue rinsing until it is clean.

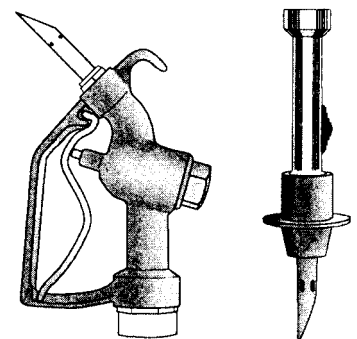
**Pressure rinsing** is a relatively new method for cleaning pesticide containers. It involves using a special nozzle attached to an adequate water source, such as a garden hose, to spray the inside of the pesticide container. If you are mixing pesticides in the field, you may consider plumbing a garden hose into the discharge side of your water supply pump.

Many applicators are beginning to use pressure rinsing for small containers because it is quicker, safer, and just as effective as triple rinsing.

### To pressure rinse a container:

1. Attach the pressure rinsing nozzle to a water hose with adequate pressure (see manufacturer's instructions).
2. Puncture the side of the container with the pointed nozzle.
3. Hold the container over the sprayer tank to allow rinsate to run into the tank.
4. Turn the pressure rinse nozzle on and rotate to insure that all inside surfaces of the container have been rinsed. Rinsing times may vary with the manufacturer's instructions, but 30 seconds is common.
5. Let containers drain and inspect to be sure they are clean; if containers are not clean, repeat steps 3-4.

Studies have shown that proper, triple rinsing or pressure rinsing will remove over 99% of the pesticide residue in the container. A properly cleaned container



**Pressure rinsing nozzles**

should have no residue remaining on the inside or outside of the container. Be sure to carefully inspect the threads, handles, and in some cases the area under the plastic label sleeve for residues.

## **Pesticide Container Disposal**

Properly cleaned pesticide containers may be disposed of in an approved landfill. Many landfills, however, are beginning to reject pesticide containers based on the potential risks from unrinsed containers. Plastic containers of any kind present a problem for many landfills since they take up space and break down very slowly.

Most plastic pesticide containers can be recycled, however.

## **Pesticide Container Recycling Program**

In 1992, the South Dakota Legislature enacted a law to provide funding for a pesticide container recycling program. The program, which is a cooperative effort of the South Dakota Department of Agriculture, the South Dakota Extension Service, ag industry, and local entities and individuals will start with two pilot sites in 1992. The program will be expanded to other areas of the state in following years.

Plastic pesticide containers of 2.5 gallons or smaller which are made of high-density polyethylene, HDPE, will be collected, shredded, and recycled into new pesticide containers.

In order for containers to be accepted for recycling, they must be inspected to certify that they have been properly rinsed and are clean. Rejected containers will be sent back for proper cleaning. Plastic caps generally are made from a different type of plastic and will not be recycled.

Plastic label sleeves also will not be recycled; it is suggested, however, that they be left in place until they are brought to the recycling site in case the containers are rejected.

### **Goals of the Pesticide Container Recycling Program:**

- To reduce the potential for ground and surface water contamination from improperly disposed pesticide containers.
- To provide an opportunity for pesticide applicators to dispose of containers when other options are not available.
- To reduce the amount of plastic entering landfills.

For additional information on the Pesticide Container Recycling Program in South Dakota, contact the South Dakota Department of Agriculture or your local Extension office.

**This publication and others can be accessed electronically from the SDSU College of Agriculture & Biological Sciences publications page, which is at <http://agbiopubs.sdstate.edu/articles/ExEx8078.pdf>**



Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the USDA. Larry Tidemann, Director of Extension, Associate Dean, College of Agriculture & Biological Sciences, South Dakota State University, Brookings. SDSU is an Affirmative Action/Equal Opportunity Employer (Male/Female) and offers all benefits, services, and educational and employment opportunities without regard for ancestry, age, race, citizenship, color, creed, religion, gender, disability, national origin, sexual preference, or Vietnam Era veteran status.

ExEx 8078- pdf by CES. June 1992; updated April 2002.