



Solid & Hazardous Waste Education Center

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6/92



FACT SHEET

Pesticide Container Disposal

Pesticide containers are constructed of glass, metal, plastic, or paper and each brings a different disposal concern. A first step in disposing any container is to make sure the container is empty.

Triple Rinsing

All emptied pesticide containers must be triple rinsed before they can be recycled or taken to landfills that accept general refuse. Triple rinsing assures removal of most pesticide residue.

1. Empty the pesticide container into the spray tank and allow it to drain until individual drops are evident.
2. Add rinse water (or solvent suggested by the manufacturer) equivalent to 10 to 20% of the containers capacity (2 to 4 qts for a 5-gallon container). Rinse the container thoroughly.
3. Pour the rinsate into the sprayer tank and again drain until individual drops appear.
4. Repeat steps 2 and 3 two more times.

Triple rinse containers immediately after emptying. Don't assume that you will have more time to rinse containers at the end of the working day. Doing so may delay the rinsing procedure even longer and you could wind up with an accumulation of unrinsed containers and nowhere to go with the rinsate solution during the off-season. Also, some pesticide formulations may be difficult to remove from the inside container walls if allowed to air dry.

Studies have shown that up to 6 1/2 oz of some pesticide formulations (particularly flowables) remain in an unrinsed 5-gallon container despite the best efforts to empty it thoroughly. Even with the best rinsing and draining procedures some residue will remain. Table 1 shows the amount of active ingredient in 1 oz of liquid remaining in a 5-gallon container that formerly held a 4 lb active ingredient per gallon formulation.

(OVER)



Table 1 Active ingredient in the 1 oz of liquid remaining in a 5-gallon container

Rinsing Stage	Pesticide residue
After draining	14.2 g
After 1st rinse	.2 g
After 2nd rinse	.003 g
After 3rd rinse	.00005 g

While residues from a single container may seem insignificant, landfill operators are worried that quantities can become substantial when a large number of unrinsed containers are involved or when the remaining liquid after rinsing is greater than 1 oz:

Table 2 Active ingredient in 25,000 Containers

Rinsing Stage	Remaining Liquid		
	1 oz	2 oz	3 oz
	(lbs pesticide residue)		
After draining	780	1560	2340
After 1st rinse	12	47	105
After 2nd rinse	0.2	1.4	4.7
After 3rd rinse	.003	.04	2

It should be evident that containers must be drained as completely as possible at each stage in the triple rinse procedure. It also should be apparent that careless disposal of container rinsates is damaging to our environment, especially when residues find their way into groundwater. Furthermore, disposing of them anywhere other than into the spray mixture is a waste of pesticide product.

Jet Spray

A jet-spray device can be attached to your water source which rinses containers easily and effectively. A piercing point punctures the container bottom so that rinsing and draining can be done simultaneously. The water spray is activated with a pull-type trigger. One university showed that a 60-second jet spray consistently removes pesticide residue at least as effectively as triple rinsing. Consequently, a 60-second jet spray rinsing has become an accepted alternative to triple rinsing.