Minimizing Residues & Managing Rinsate
The last time the container to be recycled is used the refiller should authorize the applicator to remove tamper evident devices, completely rinse the container into the application equipment and apply all pesticides according to label directions.

Review state and local environmental rules and use these (together with the label and MSDS) to identify any product that may be regulated under hazardous waste rules. Some residues may be moved to containers that are dedicated to pesticide rinsate management.

The container is not clean if strong odors or visible residues are present.

If a Container cannot be cleaned
If the container has visible residue not removable via normal cleaning then it is outside the scope of an ACRC recycling program. Contact the registrant for disposal guidance.

Look inside container. Remove liquid residue!

Mark the container as required by the recycling program.

Remove DOT Hazmat labels. Keep Pesticide Panel label on container.

Safely Cleaning Refillable Pesticide Containers for Recycling

This guidance is intended for refillers, growers and others who have decided to recycle their refillable pesticide containers. Cleaning the container before recycling (or disposal) is the responsibility of the person disposing of the container. (40 CFR§156.156)

Sponsored by Ag Container Recycling Council (ACRC) & CLA

For more info contact:
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Conduct an Environmental Health & Safety (EHS) Review

Review the label and Material Safety Data Sheet (MSDS) for each pesticide product, noting safety information. Find & review the section labeled “Storage and Disposal”.

Workers cleaning containers may need to be certified applicators, trained as handlers under the Worker Protection Standard (40 CFR §170), or trained/certified to wear PPE, manage waste, operate equipment, and/or transport containers.

Workers should wear the personal protective equipment (PPE) required on the mixing, loading and application. If many different containers are to be cleaned, use the most protective PPE.

Cleaning should be done on a mix load pad, or other containment structure that allows collection of rinse water.

Review the site/facility safety procedures and environmental policies. If industrial equipment (pressure washers, forklifts, etc.) are used then review the manuals and safe operating procedures.

Be prepared, if necessary, to contact:
- Pesticide Registrant
- Container Manufacturer
- Local Container Recycler
- State Pesticide Official
- State or Local Waste Regulator
- Waste Disposal Contractor
- Local/State/Regional Trade Associations

Cleaning Process

1. Inspect the container to determine cleaning needs and adjust cleaning appropriately.

2. Keep EPA pesticide panel label and unique identifier e.g. serial number on the container.

3. Thoroughly clean the exterior of the container to remove dirt and chemical residue. Wash until all visible residues are completely gone, using water and a scrub brush, or equivalent, if necessary. Manage rinsate appropriately throughout. The cleaning method used should result in an exterior which is free of liquid or solid residue. Some discoloration of the container is acceptable, residues are not.

4. Find and read information on the label that describes the cleaning instructions for the container. Thoroughly rinse the container using the cleaning instructions on the label. The following instructions for cleaning refillable pesticide containers will be common on labels after August 2010:

   “To clean the container; fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.”

   If the label is not available or if there are no rinsing instructions on the label, thoroughly rinse the container using the residue removal procedure developed by the registrant; or other guidance, such as the following:

   “Use a sprayer with water to quickly and completely rinse the interior of the container. A high pressure sprayer with a rinsing nozzle could provide a thorough rinse of the interior. Drain and collect rinsate from the container. If specifically recommended by the registrant, add a commercial tank-cleaning compound (soap or cleaner) to warm water. Spray and rinse thoroughly, flush the interior and repeat. “

5. Drain and collect rinsate into application equipment or a rinsate collection system. Where possible, segregate rinsate according to crop (e.g. corn, soybeans) and manage rinsate appropriately. Verify all recordkeeping is complete, especially for any rinse water or waste.

6. Drain the container dry so no water or cleaning solution (if used) remains. A pump or dedicated wet-dry shop vacuum could be used to remove any remaining rinsate.

Caution: If product is a DOT combustible or flammable class 3 (a.k.a. “red label”), use a pump or wet-dry shop vacuum only if combustible vapors are not present (verify with a Combustible Gas Indicator).

7. As required in the local recycling program, remove any item that will not be recycled and further disassemble as required. Cages on caged tanks or IBCs (Intermediate Bulk Container) generally do not need to be removed and will be accepted for recycling or reuse.

8. Store cleaned container in secure, dry location until recycled. Limit access only to authorized people.

9. Mark and label the container if required in the local program, and complete any recordkeeping required for the container. Remove any DOT Hazmat labels or marks.