



# Nebraska Pesticide Container and Secondary Containment Rules

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*This NebGuide examines the rules and regulations in Nebraska concerning pesticide containers, pesticide repackaging, and secondary containment of bulk agricultural pesticides and fertilizers.*

The US Environmental Protection Agency (EPA) Pesticide Container and Containment (PCC) Rule is intended to ensure that containers are strong and durable and that cross-contamination or other problems do not occur. The PCC Rule aims to minimize human pesticide exposure while handling containers, facilitate pesticide container disposal and recycling, and protect the environment from pesticide spills, leaks, or other accidents at bulk storage sites during the pesticide repackaging or dispensing process. The PCC Rule may apply to you if you are a pesticide registrant, refiller, distributor, retailer, commercial applicator, custom blender, or end user.

## Pesticide Containers

EPA pesticide container rules apply to nonrefillable and refillable containers, including the repackaging of pesticides in refillable containers. The PCC Rule also addresses labeling on pesticide containers, including requirements for cleaning and disposing of empty containers.

## Nonrefillable Containers

Registrants, formulators, distributors, and dealers are responsible for ensuring that their nonrefillables meet standards. EPA's publication *A Snapshot of the EPA Container and Containment Rule* (2009) explains that for products that are not restricted-use, and are in Toxicity Categories III and IV, containers must:

- Meet basic US Department of Transportation (DOT) requirements in the Code of Federal Regulations (49 CFR Part 173.24).

Packaging for all other products (Restricted Use Pesticides (RUP) and/or Toxicity Categories I or II) must meet the nonrefillable container requirements. Nonrefillables must:

- Meet certain requirements for DOT construction, design, and marking (for example, five-gallon or smaller containers should be capable of 99.99 percent residue removal; three-gallon or smaller containers require special lids).
- Be vented so product does not surge and pours in a continuous stream (in other words, doesn't "glug"); dripping outside the container should be minimal.

Labels on nonrefillable containers identify them as nonrefillable with a "Do not reuse or refill" statement. The

label also contains cleaning/rinsing and disposal instructions, recycling instructions (Figure 1), and a lot number identifying the batch.

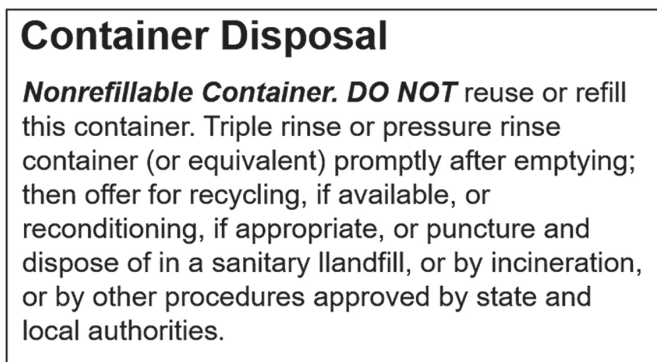


Figure 1. Example of label language on a nonrefillable container.

### Refillable Containers

Registrants and independent refillers (those who repackage but do not register the product) must comply with requirements for (1) the design and construction of refillable containers, and (2) the repackaging of pesticide products in refillable containers (Figure 2).

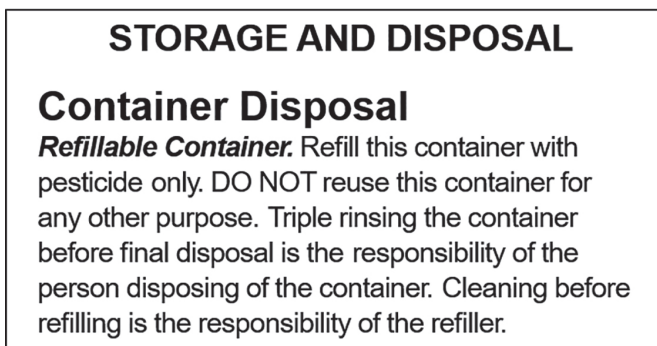


Figure 2. Example of label language on a refillable container.

### Design and Construction

Stationary containers are fixed in place or otherwise remain at a single facility or establishment for 30 or more days, holding pesticides the entire time. When designed to hold 500 or more gallons of liquid pesticides, or 4,000 or more pounds of dry pesticides, these containers require:

- A serial number or other identifying code,
- Sufficient strength and durability,
- Vents that limit evaporation and pressure buildup,
- No external sight gauges, and
- For liquid containers, lockable shutoff valves on all connections located below the container's normal liquid level.

In addition, if a stationary container of this design holds agricultural pesticides, it must be held in a secondary containment unit. Secondary containment units have their own design requirements.

Portable refillable containers include mini bulks, shuttles, and totes. Registrants are responsible for making sure these containers meet DOT standards and bear a DOT transport marking and serial number. Every opening on these containers (excluding vents) must be equipped with either a one-way valve, a tamper-evident device, or both.

These changes have resulted in many older containers being recycled. Tri-Rinse, Inc. and many other agricultural manufacturers or distributors offer programs to properly collect and destroy old mini-bulk containers that can no longer be used under the PCC Rule. Many of these programs will continue for years as old containers are removed from circulation and replaced by new, compliant containers. In Nebraska, Tri-Rinse will collect containers annually, biannually, or as requested. For more information, see [www.tri-rinse.com/](http://www.tri-rinse.com/).

### Repackaging

A pesticide product's registrant may allow independent refillers to repackage their product into refillable containers for distribution or sale. Both the registrant and refiller are responsible for ensuring product integrity (i.e., not altering the formulation). The two parties must enter into a written contract, and the registrant must provide the following documents to the refiller, who must keep them on file:

- Procedures for cleaning refillable containers, and
- Descriptions of acceptable containers for a given product that meet design and construction requirements.

There are no regulatory limits on the size of refillable containers, but the registrant may establish size limitations in their contract with the refiller.

A refiller must be registered with the EPA as a "producing establishment." During the repackaging process, refillers need to meet certain requirements, including:

- Identifying the previous pesticide that was in the refillable container;
- Ensuring that the container is included in the registrant's description of acceptable containers;
- Visually inspecting the container to ensure it is safe and has the required marks and openings;
- Having the product's labeling on site;

- Cleaning the container, unless all tamper-evident devices and/or one-way valves are intact AND the container is being refilled with the same product (or other limited circumstances);
- Ensuring the container's rated capacity is not exceeded;
- Properly labeling the container, including EPA establishment number and net contents;
- Recording product repackaging information, such as EPA registration number, date of repackaging, and container serial number; and
- Complying with other recordkeeping (40 CFR Part 169) and reporting (40 CFR Part 167) requirements for pesticide producers.

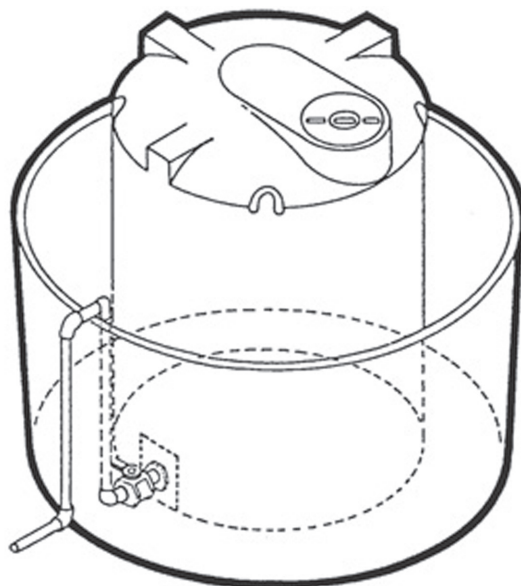


Figure 3. Secondary containment.

### Secondary Containment/Load-out Facilities

Large containers of bulk liquid fertilizers or pesticides pose some unique challenges, such as the potential for spillage or leakage into groundwater or surface water. To address these issues, there are secondary containment and load-out facility standards covered by the EPA containment rules and Nebraska Title 198, *Rules and Regulations Pertaining to Agricultural Chemical Containment*. These rules apply specifically to **agricultural pesticides** and liquid fertilizers. According to Title 198, which is administered by the Nebraska Department of Environment and Energy (NDEE), secondary containment is “a device or structure designed, constructed, and maintained to hold or confine a release of a liquid pesticide or liquid fertilizer from a storage facility.” Simply stated, this means using a larger container to hold a smaller container in order to prevent leakage (Figure 3).

Also, a load-out facility (Figure 4) is defined as “a location, other than the field of application, used for the loading, unloading, handling, or mixing of pesticides or fertilizers or a location used for the rinsing or washing of delivery or application equipment which is designed, constructed, and maintained to hold or confine a release of a liquid pesticide or liquid fertilizer.” For more detailed information about rules pertaining to size, capacity, enclosed or not enclosed, and other aspects of secondary containment and load-out facilities, see the full Title 198 rule at [http://deq.ne.gov/RuleAndR.nsf/Title\\_198.xsp](http://deq.ne.gov/RuleAndR.nsf/Title_198.xsp).

Liquid pesticides require secondary containment if the total storage capacity of bulk liquid pesticide containers (>55 gallons) at a storage facility exceeds 500 gallons. For example, if a storage facility has four 250-gallon liquid pesticide containers, its total storage capacity is 1,000 gal-

lons, regardless of whether the containers are actually full of product. This facility would therefore require secondary containment.

Dry pesticides require secondary containment when 4,000 or more pounds of undivided product are held in an individual container.

Liquid fertilizers require secondary containment if:

- One fertilizer container's capacity exceeds 2,000 gallons,
- Two or more fertilizer containers have a combined capacity greater than 3,000 gallons, or
- Anytime, between November 1 and March 15, liquid fertilizers are stored in a container larger than 500 gallons, in quantities exceeding 25 percent of the container's capacity. For example, a 1,000-gallon container with more than 250 gallons of liquid fertilizer in it during December would require secondary containment.

Secondary containment is not required if the contents of one or more containers (up to 6,000 gallons total) are stored at the application site between March 15 and October 1 for no more than 21 consecutive days. Note that this exception is specific to application sites, and some containers, such as those used in chemigation, do not qualify for this exemption. Containers must also follow other rules, including maintaining a minimum distance from wells and surface water.

A load-out facility is required whenever liquid pesticides or fertilizers require secondary containment, as well as when:

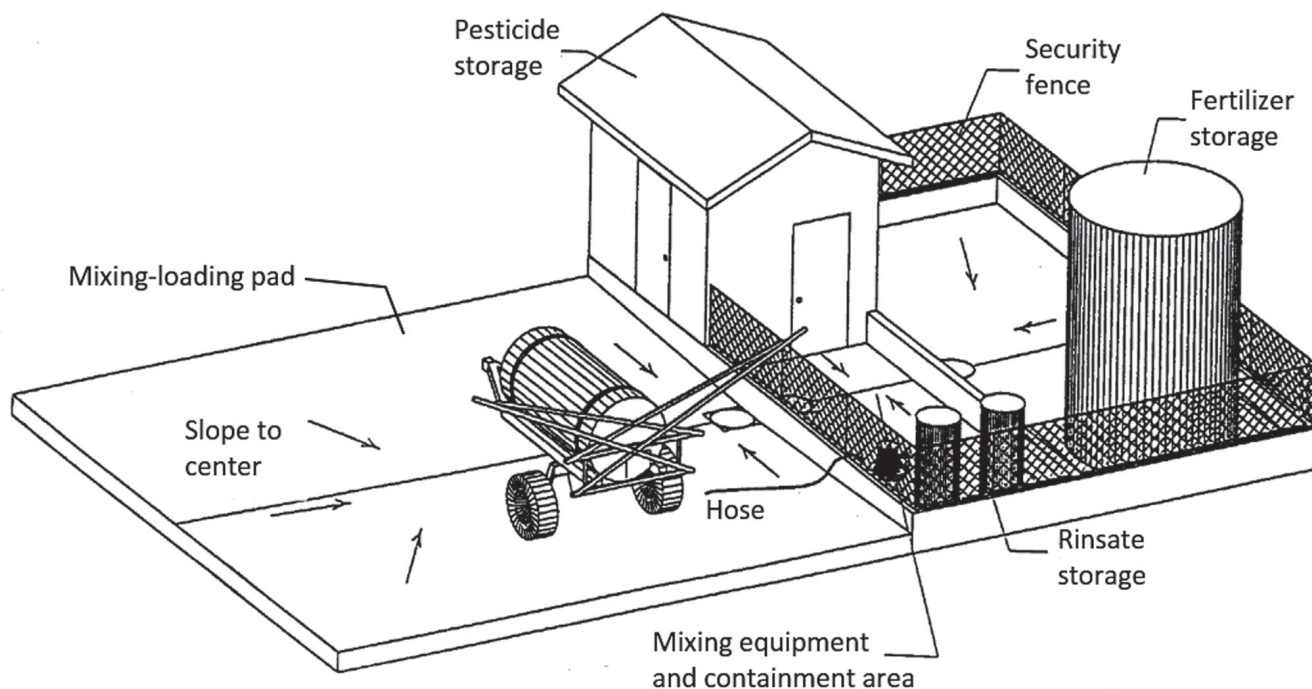


Figure 4. A load-out pad.

- A custom applicator uses liquid pesticides from an original container with a capacity greater than 3 gallons,
- A custom applicator prepares a pesticide or fertilizer mixture in a quantity greater than 100 gallons (including carrier water), or
- Bulk fertilizer or bulk liquid pesticide is loaded or unloaded from rail cars.

An exception: a load-out facility is **not** required when all load-out activities (loading, mixing, rinsing, etc.) are conducted at the application site as part of the normal application. For more information about containment rules and/or exceptions, consult the NDEE publication *Fertilizer and Pesticide Containment in Nebraska* (see Resources).

While Title 198 does not require either registration or a permit, you must have a construction plan and management program for secondary containment and load-out facilities. The construction plans must be certified by a Nebraska

registered professional engineer. These plans remain with the owner and must be made available to NDEE upon request.

Containment standards follow existing NDEE regulations. For guidance contact the NDEE at (402) 471-2186 or visit them at <http://deq.ne.gov/>.

## Resources

- Fertilizer and Pesticide Containment in Nebraska*, 2004, Nebraska Department of Environment and Energy. <http://www.deq.state.ne.us/>. Search for publication title.
- Title 198: Rules And Regulations Pertaining To Agricultural Chemical Containment*, Nebraska Department of Environment and Energy. [http://deq.ne.gov/RuleAndR.nsf/Title\\_198.xsp](http://deq.ne.gov/RuleAndR.nsf/Title_198.xsp).
- A snapshot of the EPA Pesticide Container and Containment Rule*, Environmental Protection Agency, 2009. <https://www.epa.gov/pesticide-worker-safety/snapshot-epa-pesticide-container-and-containment-rule>.
- 40 CFR Part 165: Pesticide Management and Disposal*, Environmental Protection Agency. <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-E/part-165>.

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