



Nebraska Pesticide Container and Secondary Containment Rules

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This NebGuide examines the rules and regulations required in Nebraska for pesticide containers and secondary containment of liquid pesticides and fertilizers.

The 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's purpose is 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 refilling or dispensing process. The PCC Rule may apply to you if you are a pesticide registrant, distributor, retailer, commercial applicator, custom blender, or end user.

Pesticide Containers

EPA pesticide container rules apply to nonrefillable containers, refillable containers, and the reuse of refillable containers (repackaging). 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 Department of Transportation (DOT) requirements in the Code of Federal Regulations (49 CFR 173.24).

Packaging for all other products (Restricted Use Products (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 (for example, not "glug"); dripping outside the container should be minimal.

Labels for nonrefillables identify them as nonrefillable containers with a "Do not use" statement. The label also

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

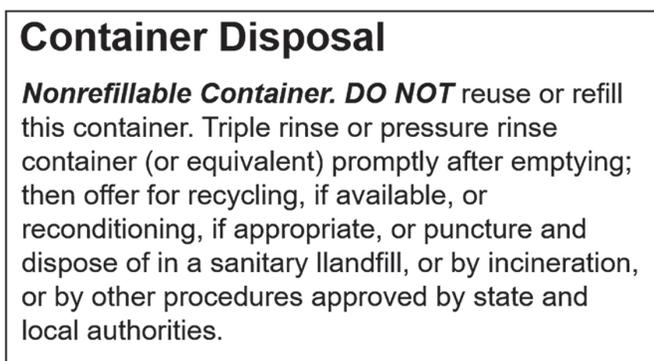


Figure 1. Example of label language on a nonrefillable container.

Refillable Containers

Both registrants and independent refillers (those who repackage but do not register the product) must comply with requirements for stationary tanks, repackaging, and portable refillable containers (Figure 2).

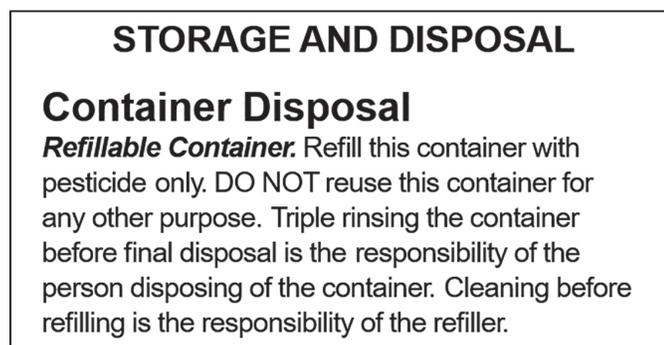


Figure 2. Example of label language on a refillable container.

Requirements for refillable containers are discussed below.

- 1) *Stationary tanks* are containers that are fixed in place for 30 or more days at the facilities of independent refillers and hold 500 gallons (liquid) or 4,000 pounds (dry) pesticides. The tanks require:
 - A serial number or other identifying code
 - Sufficient strength and durability
 - Vents that limit evaporation
 - No external sight gauges
 - A lockable inlet/outlet valve

- Secondary containment if holding an agricultural pesticide
 - Anchorage or elevation to prevent flotation if holding an agricultural pesticide
- 2) Registrants are responsible for making sure *portable refillable containers* (*mini bulks, shuttles, totes, etc.*) meet DOT standards and bear a DOT transport marking and serial number. They also must be tamper resistant or have one-way valves. These changes will result in many older containers being recycled. Tri-Rinse, Inc. and many other agro chemical 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 being taken out of 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/.
 - 3) *Repackaging* requirements for any refiller or registrant include:
 - A written contract between the independent refiller and the registrant
 - Responsibility for product integrity
 - No regulatory limits on size of refillable containers, although in their contract, registrants might establish a specific size limitation
 - Acquiring from the registrant 1) procedures to clean refillables; 2) descriptions of acceptable containers that meet stationary tank and portable refillable requirements. Refillers must have these documents on file.
 - 4) Important requirements that refillers need to implement during the repackaging process include:
 - Identifying the previous pesticide that was in the refillable container and visually inspecting the container to ensure it is safe and has the required marks and openings
 - Cleaning containers unless the tamper-resistant or one-way valve is intact and the container is being refilled with the same product (or if a new product meets other limited circumstances)
 - Ensuring that the container is included in the registrant's description of acceptable containers

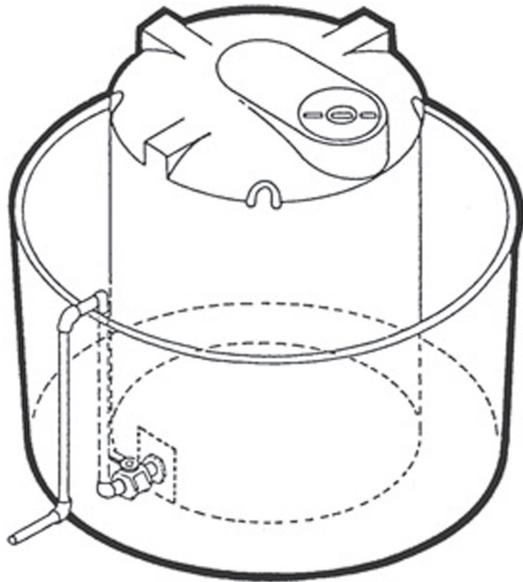


Figure 3. Secondary containment.

- Properly labeling the product, including the EPA establishment number and net contents
- Recording product repackaging information, such as date of repackaging and container serial number
- Examples of label language for refillables include a “refillable container” statement and instructions for cleaning the container before recycling or disposal (not before being refilled).

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*. According to Title 198, 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.

The Nebraska Department of Environmental Quality (NDEQ) administers Title 198. According to the NDEQ,

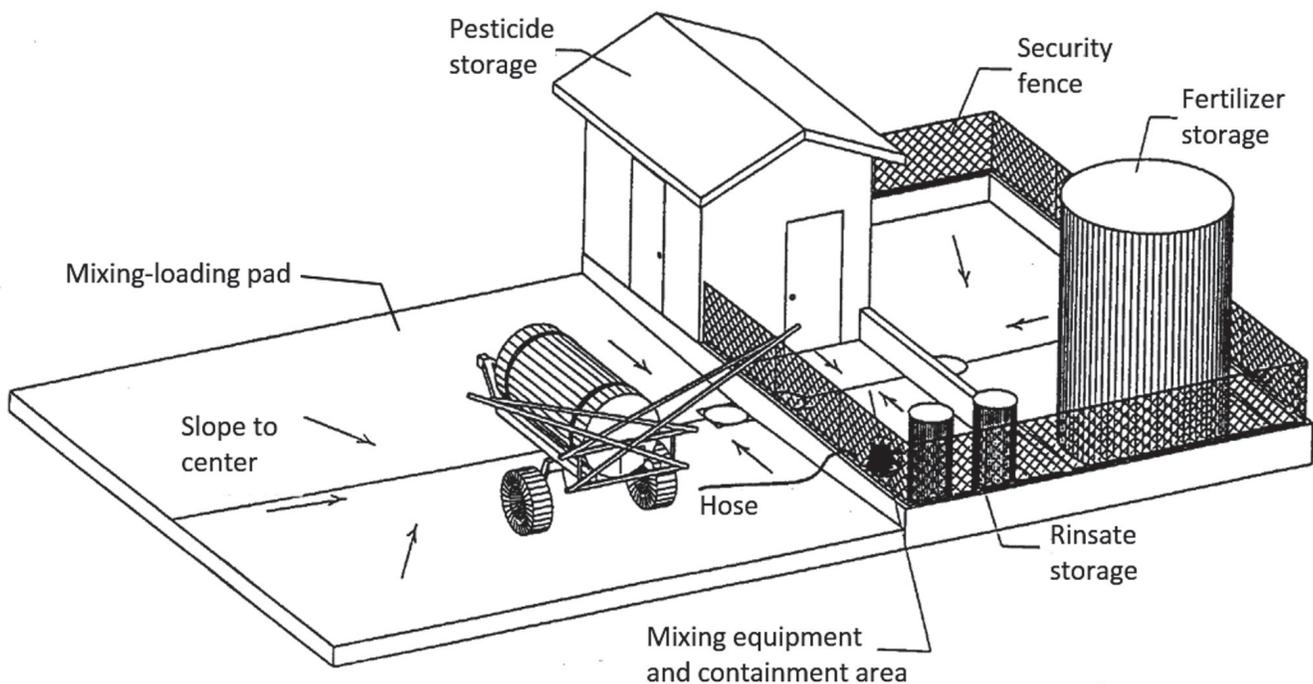


Figure 4. A load-out pad.

secondary containment and/or load-out facilities are required if the storage capacity of a liquid pesticide exceeds 500 gallons. Also, custom applicators must be aware that load-out facilities are required if using liquid pesticides in original containers greater than 3 gallons or if using mixtures of liquid fertilizers or pesticides in containers greater than 100 gallons.

Liquid fertilizer storage requirements differ from liquid pesticide storage requirements in that liquid fertilizers require secondary containment if:

- One container exceeds 2,000 gallons
- Two or more containers have a combined capacity greater than 3,000 gallons, or
- Liquid fertilizers are stored anytime between November 1 and March 15 in quantities that occupy over 25 percent of the container capacity for containers larger than 500 gallons.

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. For more information about containment

rules and/or exceptions, consult the NDEQ publications *Are Environmental Regulations becoming a Pest?* or *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 NDEQ upon request.

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

Resources

Are Environmental Regulations becoming a Pest? Nebraska Department of Environmental Quality. http://www.nda.nebraska.gov/pesticide/ndeq_title198.pdf.

Fertilizer and Pesticide Containment in Nebraska, 2004, Nebraska Department of Environmental Quality. <http://www.deq.state.ne.us/>. Search for publication title.

Title 198: Rules And Regulations Pertaining To Agricultural Chemical Containment, Nebraska Department of Environmental Quality. 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>.

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