

# ABC's of Refillable Container Requirements

National Agronomic Environmental  
Health & Safety School

August 18, 2010

# Container-Containment Rule Overview

Category	Nonrefillable Containers	Refillable Containers	Repackaging Products	Container Labeling	Containment Structures
Who must comply?	Registrants	Registrants	Registrants Refillers	Registrants Users	Ag retailers Ag comm apps Ag custom bldr
Major Requirements	<ul style="list-style-type: none"> <li>- DOT container design, construction &amp; marking standards</li> <li>- Dispensing capability</li> <li>- Standard closures</li> <li>- Residue removal (99.99% removal)</li> </ul>	<ul style="list-style-type: none"> <li>- DOT container design, construction &amp; marking standards</li> <li>- One-way valves or tamper-evident devices</li> <li>- Vent, gauge &amp; shutoff valve standards for large tanks</li> </ul>	<ul style="list-style-type: none"> <li>- Registrants &amp; refillers comply with specified conditions</li> <li>- Registrants develop &amp; provide certain information</li> <li>- Refillers obtain &amp; follow information; and clean, inspect &amp; label containers before refilling them</li> </ul>	<ul style="list-style-type: none"> <li>- Identify container as nonrefillable or refillable (<i>all</i>)</li> <li>- Statement to prohibit reuse and offer for recycling; batch code (<i>all nonrefillables</i>)</li> <li>- Cleaning instructions (<i>some nonrefillables</i>)</li> <li>- Cleaning instructions before disposal (<i>all refillables</i>)</li> </ul>	<ul style="list-style-type: none"> <li>- Secondary containment structures (dikes) around large tanks</li> <li>- Containment pads for pesticide dispensing areas</li> <li>- Good operating procedures</li> <li>- Monthly inspections of tanks &amp; structures</li> </ul>
Compliance Date	Aug 17, 2009	Aug 17, 2011	Aug 17, 2011	Dec 17, 2010 Aug 17, 2011?	Aug 17, 2009

# Which Products Must Comply?

- The **nonrefillable container, refillable container and repackaging requirements** apply to all pesticide products except for:
  - Manufacturing use products (MUPs);
  - Plant-incorporated protectants (PIPs); and
  - Antimicrobial products that are exempt.
- There are some specific exemptions and partial exemptions.

# What is the difference between nonrefillable & refillable containers?

- **Nonrefillable container:** designed & constructed for one-time use and not intended to be filled again with a pesticide for sale or distribution.
- **Refillable container:** intended to be filled with pesticide more than once for sale or distribution.



A nonrefillable container will have a label that says: “Nonrefillable container. Do not reuse or refill this container.” **These containers cannot legally be reused or refilled!**

# New Requirements in 2011

If you repackage pesticides under contract/ agreement with a registrant, you must comply with the following requirements when you repackage a pesticide (& release it for shipment) after **August 16, 2011**:

1. Operational and recordkeeping requirements regarding **repackaging**;
2. Standards for your **stationary bulk tanks**; and
3. Standards for your **portable refillable containers** (i.e., minibulks, IBCs).

# 1. Repackaging Requirements

- Conditions for repackaging under a registrant's existing registration [**§165.70(b)**]
- Requirements for independent (non-registrant) refillers [**§165.70(e)**]
- Look at reg text in your binder (page 4-5)



# 1.A. Conditions for Repackaging

Under §165.67(b) & §165.70(b), a registrant may allow an independent refiller to repack a pesticide under the registrant's existing registration if:

1. There is no change to the pesticide formulation;
2. The refiller's establishment is registered with EPA;
3. The registrant & refiller have entered into a written contract;
4. The pesticide is repackaged only into containers that comply with the refillable container requirements; and
5. The pesticide is labeled, with the only changes being the net contents and the refiller's EPA establishment number.

# 1.B. Refiller Requirements

An independent refiller must comply with all of the requirements in §165.70(e):

1. Register the establishment per §167.20;
2. Not change the formulation;
3. Repackage only into a refillable container on registrant's description of acceptable containers;
4. Can repackage any quantity; no container size limits;
5. Have the following items before repackaging:
  - Contract + label/labeling
  - Registrant's cleaning procedure and description of acceptable containers;
6. Identify the pesticide previously in the container;
7. Visually inspect the container;

*(continued on next page)*

# 1.B. Refiller Requirements

An independent refiller must comply with all of the requirements in §165.70(e):

8. Clean the container if necessary
  - Must be cleaned between uses unless all tamper-evident devices and one-way valves are intact and filled with the same product;
9. Ensure the container is properly labeled;
10. Maintain records of the information from the registrant; and each time the container is refilled, record the date, serial number/code of the container; & pesticide;
11. Maintain records required by Part 169;
12. Report production as required by Part 167;
13. Stationary containers must meet certain standards; and
14. You may be required to comply with the federal containment standards.

# New Requirements in 2011

If you repackage pesticides under contract/ agreement with a registrant, you must comply with the following requirements when you repackage a pesticide (& release it for shipment) after **August 16, 2011**:

1. Operational and recordkeeping requirements regarding repackaging;
2. **Standards for your stationary bulk tanks**; and
3. Standards for your portable refillable containers (i.e., minibulks, IBCs).

## 2. Standards for Stationary Tanks

Stationary tanks (holding at least 500 gallons & at independent refillers) must:

- Be durably marked with a serial number/identifying code;
- Meet integrity/strength standards;
- Have a vent;
- Have a shut-off valve on any connection below the normal liquid level; and
- Not have an external sight gauge.

**[§165.45(d) & (f)]**



# New Requirements in 2011

If you repackage pesticides under contract/ agreement with a registrant, you must comply with the following requirements when you repackage a pesticide (& release it for shipment) after **August 16, 2011**:

1. Operational and recordkeeping requirements regarding repackaging;
2. Standards for your stationary bulk tanks; and
3. **Standards for your portable refillable containers (i.e., minibulks, IBCs).**

# 3. Portable Refillable Containers

You must repackage into portable refillable containers that:

- Comply with at least DOT Packing Group III standards;
- Are durably marked with a serial number/identifying code;
- Have a tamper-evident device, one-way valve or both on each opening other than a vent; and
- Are on the registrant's list of acceptable containers.

**[§165.45(a)-(e); §165.70(e)(3)]**



## 3.A. DOT/United Nations Marking

- All portable refillable containers must meet at least the DOT packing group III standards. [§165.45(a) & (b)]
- Generally, can determine this by the UN/DOT marking, such as: un 31H2/Y/12/06/USA/etc.
- Important: look for UN symbol and X, Y or Z
  - X = meets PG I stds (most stringent)
  - Y = meets PG II stds
  - Z = meets PG III stds
- The DOT standards that are incorporated in §165.45(a) authorize a limited number of “portable tanks” that comply but do not require the UN marking.
  - Rely on the registrant’s description of acceptable containers.
- Also includes ongoing maintenance and testing (e.g., pressure test).

# 3.A. DOT Requirements

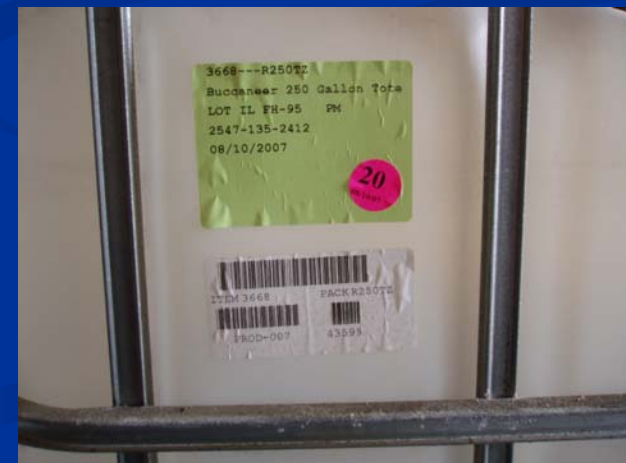


# 3.A. DOT Requirements



## 3.B. Serial Number/Identifying Mark

Each refillable container must be durably marked with a serial number or other identifying code. **Durable marking includes an adhesive label if it's securely attached.** [§156.10(a)(4)]



### 3.C. Tamper-Evident Device/One-Way Valve

For portable refillable containers holding liquid pesticides, each opening other than a vent must have a **one-way valve, a tamper-evident device, or both.** [§165.45(d)]



## 3.C. Tamper-Evident Device/One-Way Valve



### 3.C. Tamper-Evident Device/One-Way Valve

- The valve at the bottom of this minibulk is not a one-way valve. The end user has to break the tamper-evident device to remove pesticide from the minibulk through this valve.
- This minibulk **complies with the refillable container regs**; it has a tamper-evident device.
- However, when the minibulk is returned, **the refiller must clean the minibulk**, even if he is refilling it with the same pesticide product.  
[See§165.70(g) & (h).]



## 3.D. Registrant's Description of Acceptable Containers

- A refiller must repackage pesticide only into a refillable container that is identified on the description of acceptable containers for that pesticide product provided by the registrant.

# Key New Requirements for Refillers

- Repackage only into compliant refillable containers. For portable containers, this means the container:
  - Is DOT compliant;
  - Is marked with a serial number/identifying code;
  - Has tamper-evident devices and/or one-way valves; and
  - Is on the registrant's description of acceptable containers.
- Clean container between uses unless all tamper-evident devices & one-way valves are intact and you are refilling with the same product.
- Get the cleaning procedure & description of acceptable containers from the registrant for each product.
- For each refill, record the date, serial number/code of container; and pesticide.

# Portable Refillable Containers: Checklist

## EPA Pesticide Container and Containment Rule

### REFILLABLE CONTAINER REQUIREMENTS

For Registrants, Agricultural Retailers, Distributors, Commercial Applicators and Custom Pesticide Blenders

#### Purpose of the Rule

U. S. EPA published the final Pesticide Container and Containment (PCC) Rule in August 2006.

The Rule seeks to provide sound stewardship practices and national consistency for pesticide labeling, container design, repackaging and storage.

This fact sheet discusses critical aspects of the Rule that affect selection, maintenance and use of refillable containers for pesticides.

#### Who Must Comply

The Rule is a federal regulation that affects all states, regardless of existing state regulations. Parts of the Rule affect retailers, commercial applicators, customer blenders, refillers (both retailers and distributors) and registrants.

#### Enforcement and Penalties

Enforcement will primarily be conducted by the U.S. EPA regions via state pesticide control officials (such as the State Department of Ag or State Environmental Protection Agency). These agencies have the authority to assess monetary penalties.



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#### An Overview of Refillable Rules

After August 16, 2011, all portable refillable containers must meet the following requirements. After this date, many existing portable refillable containers will be obsolete if they cannot meet these requirements.

- One-way valves or tamper evident device on openings (other than vents) is required. Contact equipment vendors about options.
- Containers must have a unique method of identification such as a serial number or other ID code.
- Must meet DOT design, construction, marking.
- No limits on size, except those placed by registrants, of the refillable container.
- Must be cleaned between uses unless tamper evident and/or one-way valves are intact and filled with same product.
- Containers must be on an approved list from the registrant.
- Must have registrant's cleaning instructions and repackaging authorization on hand.
- EPA Est. # and net contents must be on the product label affixed to the tank.
- Container integrity is the responsibility of both refiller and the registrant.
- Records must be kept for each inspection and fill.

#### What You Should Do NOW

Use the check sheet on the back to evaluate each refillable container. Identify which containers must be phased out, and which must be modified prior to August 2011. Study the rule since there are other parts that may affect your business.

To learn more, attend the National Agronomic EHS School in Bloomington, Ill., August 18, 2009. (<http://info://www.naehs.org/>) This year's school program will include hands on inspection of mini-bulks.

## Pesticide Refiller Checklist for Portable Refillable Containers

The answer to each question for every container should be "Yes"; otherwise, **FIX IT before August 16, 2011.**

#### All Refillable Containers

1. For containers holding liquids, all openings (except vents) have one-way valves, tamper evident devices or both?
2. Does the container have a unique serial number or other identifying mark? Note the unique number for container being checked here #: \_\_\_\_\_ . Does each container have its own checklist?
3. The container will not leak under normal transport conditions?
4. The container is visually inspected before reuse and will not be reused unless it is free from incompatible residue, rupture or damage which reduces structural integrity?
5. The container is strong enough to undergo normal handling without damage?
6. The registrant has provided you (the refiller) a description of acceptable containers for the products you refill?
7. The container is compatible with the pesticide? (Use registrant's list of approved containers to verify.)
8. The container can be closed in compliance with container manufacturer's written instructions?
9. Pesticide residue or spilled material will not be on the outside of the container after filling?
10. The registrant has provided you (the refiller) with a contract allowing you to use the registrant's label?
11. The registrant has provided you (the refiller) with written residue removal procedures (cleaning instructions)?

#### Containers less than 119 gallons or 882 lbs

12. Is container marked to indicate it meets, at least, US DOT PG III / UN authorization standards? *Combination packages larger than 5 liters or 5 kg, and all single packages require UN authorization.*
13. Is the container as it was when tested & authorized? *If container is altered, retesting is required!*
14. Are drums authorized for reuse? *Drums are only authorized when they are marked in a permanent manner with the nominal (metal) or minimum (plastic) thickness of the packaging material.*

*Other rules exist. For instance, liquid containers must not be liquid full at 130°F. Specific gravity of liquids must not exceed the marked limit (adjust for PG I & II). Combination packages with liquids must have closures upright. Inner packages must be cushioned with compatible materials. Paper, plastic film or textile packaging are not authorized for reuse.*

#### Containers greater than or equal to 119 gallons or 882 lbs

**Includes portable tanks and Intermediate Bulk Containers (IBCs)**

15. The container has "UN" authorized markings indicating it meets, at least, US DOT PG III? If not marked, the manufacturer has verified it meets, at least, US DOT PG III? *DOT Spec. 51, 56, 57 and 60 portable tanks; IMO type 1, 2 and 5, IM 101 and IM 102 portable tanks; UN portable tanks; marine portable tanks conforming to 46 CFR part 64; and non-DOT specification portable tanks are authorized for many products.*
16. If container is UN authorized or a US DOT Specification tank, then has it been leak-proof tested, externally inspected and marked every 2.5 years, and has it been internally inspected & marked at least every five years and are records available for the testing?

*Other rules exist. For instance, liquids may not exceed 99% of capacity when heated to 115°F. Maximum weight marked can never be exceeded. Flexible, fiberboard or wooden IBC's must be visually inspected before each fill.*

This checklist does NOT cover all aspects of the Pesticide Container & Containment Rule. The EPA summary and Rule is available at: [www.epa.gov/pesticides/regulating/containers.htm](http://www.epa.gov/pesticides/regulating/containers.htm)

# For More Information

## **Environmental Protection Agency (EPA)**

- <http://www.epa.gov/pesticides/regulating/containers.htm>
- Nancy Fitz, 703-305-7385; [fitz.nancy@epa.gov](mailto:fitz.nancy@epa.gov)

## **American Agronomic Stewardship Alliance (AASA)**

- <http://www.aginspect.org/USEPA.html>

## **CropLife America (CLA)**

- <http://www.croplifeamerica.org> & [www.croplifefoundation.org](http://www.croplifefoundation.org)

## **Mid America CropLife Association (MACA)**

- <http://www.maca.org/edu>

## **Pesticide Stewardship: See Container Handling for inspection video**

- <http://pesticidestewardship.org/Pages/default.aspx>

## **State Inspector Training**

- <http://pirt.pested.psu.edu/resources>