Pesticide Container-Containment Regulations

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U.S. EPA Office of Pesticide Programs
IOPP CPC Meeting
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Outline

1) Overview of Container-Containment Regulations
2) Amendments to the Container-Containment Regulations
3) Label Implementation
4) Other Updates
5) Pesticide Container Recycling Rule
1. Overview: Purpose of the Rule

◆ Containers
  - Minimize human exposure during container handling
  - Facilitate container disposal & recycling
  - Encourage use of refillable containers

◆ Containment
  - Protect environment from releases at bulk storage sites
  - Protect environment from spills & leaks at refilling & dispensing operations
# 1. Overview: Who, What, When?

<table>
<thead>
<tr>
<th>Category</th>
<th>Nonrefillable Containers</th>
<th>Refillable Containers</th>
<th>Repackaging Products</th>
<th>Container Labeling</th>
<th>Containment Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Who must comply?</strong></td>
<td>Registrants</td>
<td>Registrants</td>
<td>Registrants Refillers</td>
<td>Registrants Users</td>
<td>Ag retailers Ag comm apps Ag custom bldr</td>
</tr>
<tr>
<td><strong>Major Requirements</strong></td>
<td>- DOT container design, construction &amp; marking standards - Dispensing capability - Standard closures - Residue removal (99.99% removal)</td>
<td>- DOT container design, construction &amp; marking standards - One-way valves or tamper-evident devices - Vent, gauge &amp; shutoff valve standards for large tanks</td>
<td>- Registrants &amp; refillers comply with specified conditions - Registrants develop &amp; provide certain information - Refillers obtain &amp; follow information; and clean, inspect &amp; label containers before refilling them</td>
<td>- Identify container as nonrefillable or refillable (all) - Statement to prohibit reuse and offer for recycling; batch code (all nonrefillables) - Cleaning instructions (some nonrefillables) - Cleaning instructions before disposal (all refillables)</td>
<td>- Secondary containment structures (dikes) around large tanks - Containment pads for pesticide dispensing areas - Good operating procedures - Monthly inspections of tanks &amp; structures</td>
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</tbody>
</table>
1. Overview: Who, What, When?

- **Registrants**
  - Ensure their nonrefillable containers *(by Aug 2009)* and refillable containers *(by Aug 2011)* comply with container standards
  - Ensure that labels have required statements *(by Aug 2009 [2010]*)
  - Authorize refiners to repackage product; develop & provide certain info to refiners *(by Aug 2011)*

- **Refillers (registrants, distributors, retailers)**
  - Obtain & follow registrant info; inspect, clean & label refillable containers *(by Aug 2011)*

- **Retailers, commercial applicators, custom blenders**
  - Must have secondary containment around large stationary tanks and containment pads for dispensing areas *(by Aug 2009)*

- **Pesticide users**
  - Follow container-related directions on label *(by Aug 2009 [2010]*)
## 1. Applicability – Which Pesticides?

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<td>Products that must comply</td>
<td>All products other than manufacturing use products (MUPs), plant-incorporated protectants (PIPs) and exempt antimicrobials.</td>
<td>All products other than MUPs, PIPs and exempt antimicrobials. Some exceptions for swimming pool antimicrobials.</td>
<td>All products other than MUPs, PIPs and exempt antimicrobials. Some exceptions for swimming pool antimicrobials.</td>
<td>All products. Some exceptions for PIPs and household pesticides.</td>
<td>Agricultural products</td>
</tr>
</tbody>
</table>

- If Toxicity Category I or II or Restricted Use Pesticide (RUP): must comply with all standards.
- If not, must comply only with basic DOT integrity standards.
2. Amendments to the Container-Containment Regulations
2. Amend Container-Containment Regulations

- Final container-containment regulations require some changes to pesticide labels
- In fall of 2007, registrants raised concerns about implementing these changes
- EPA considered options, proposed revisions to resolve issues:
  - Extend compliance date for label requirements
  - Change “sold or distributed” to “released for shipment” in all compliance dates
  - Exempt certain container types from some of the label requirements
  - Provide option to request waivers from container type statements on a case-by-case basis
  - Make corrections (mostly editorial; a few clarifications)
- Expedited schedule
  - June 2008: Proposed rule
  - October 2008: Final rule
2.A. Extend Compliance Date

◆ **Current Regs**
  - As of **August 17, 2009**, all pesticide products distributed or sold by a registrant must have labels that comply with §§156.10(d)(7), 156.10(f), 156.10(i)(2)(ix), 156.140, 156.144, 156.146, and 156.156.

◆ **Proposed Revision**
  - As of **August 17, 2010**, all pesticides products released for shipment by a registrant must have labels that comply with...

◆ **Comments**
  - Supported extension
  - Suggested alternative: All pesticide products released for shipment by a registrant after **August 17, 2010** must have labels that comply with...
2.B. Released for Shipment

◆ Current Regs
  ◆ As of August 17, 2009, all pesticide products distributed or sold by a registrant must ...

◆ Proposed Revision
  ◆ As of August 17, 2010, all pesticides products released for shipment by a registrant must ...
  ◆ Add a definition of “released for shipment” to 40 CFR 152.3: A product is released for shipment when the producer has packaged and labeled it in the manner in which it will be shipped, or has stored it in an area where finished products are ordinarily held for shipment. An individual product is only released for shipment once, except where subsequent events constitute production (e.g., relabeling, repackaging).
2.B. Released for Shipment

Comments

- Supported changing “distributed and sold” to “released for shipment” and adding a definition

- Both conditions should be met for a product to be considered released for shipment, i.e., producer has packaged and labeled the product in the manner in which it will be shipped, **AND** has stored it in an area where finished products are ordinarily held for shipment.

- Definition could be interpreted to mean that a product could be released for shipment more than once

- Add clarification: “Products stored in an area where finished products are ordinarily held for shipment but which are not intended to be released for shipment must be physically separated and marked as not yet released for shipment.”
2.C. Label Requirements in C-C Rule

Container Type Requirements

- Identify container as nonrefillable or refillable
- Re-use & recycling/reconditioning statements + batch code
  - All nonrefillable containers

Residue Removal Requirements

- Cleaning instructions for nonrefillables: triple rinsing and option to include pressure rinsing
  - Applies to rigid nonrefillable containers with dilutable pesticides
  - Household products exempt
- Cleaning instructions before final disposal
  - All refillable containers
3.C. Exemptions from Nonrefillable Container & Reuse Statements

- **Current Regs**
  - All products except plant-incorporated protectants must have phrase “Nonrefillable container.” and a reuse statement (plus a recycling/reconditioning statement).
  - “Nonrefillable container. Do not reuse or refill this container.”

- **Proposed Changes**
  - Exempt certain types of nonrefillable containers and packaging from nonrefillable container & reuse statements:
    - Aerosol cans
    - Nonrefillable caulking tubes & other squeezable tubes
    - Foil packets for water-soluble packaging, wipes, etc.
    - Tamper-resistant bait stations
    - Tamper-resistant cages for repellent or trapping strips
    - Packaging for pet collars
    - One-time use semiochemical dispersion devices
    - Any packaging that is destroyed by use of the product
    - Any packaging that would be destroyed if reuse was attempted
3. Exemptions from Nonrefillable Container & Reuse Statements

**Comments**

- Should also exempt one-time use portion control packets
- Bait stations – “tamper-resistant” implies rodenticides; should also include bait stations in “child-resistant packaging” which is generally used for insecticides
- Should also exempt devices
- Should exempt cattle ear tags; similar to pet collars,
- All of the listed products should also be exempt from the recycling/reconditioning statement
2.D. Exemption for Transport Vehicles

◆ Current Regs

◆ Products that are distributed only in a transport vehicle (manufacturer delivers to end user’s bulk tank) must have the container type & residue removal statements that apply to refillable containers:

◆ “Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.”

◆ “Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before disposal, …”

◆ Proposed Revision

◆ Exempt transport vehicles from residue removal statements

◆ Comments

◆ Should also exempt transport vehicles from refillable container type statements
2.E. Allow Waivers on Case-by-Case Basis

◆ Current Regs
  ◆ The following provision in §156.144(d) allows modifications/waivers of residue removal statements:
    ◆ EPA may, on its own initiative or based on data submitted by any person, modify or waive the residue removal requirements, or permit or require alternative labeling statements.

◆ Proposed Revision
  ◆ Add similar provision to §156.140 to allow modifications/waivers of the container type, reuse, and recycling statements and batch codes

◆ Comments
  ◆ Supportive
  ◆ Suggested that EPA keep a list of exemptions in a PR Notice or on web site so repeat requests would not have to be made
2.F. Schedule & Next Steps for the Amendments

♦ **Schedule**
  - June 11, 2008: Proposal with 30 day comment period
  - November 1, 2008: Amendments finalized

♦ **Outreach material**
  - Federal Register Notice
  - Marked-up version of regulatory language
  - List of changes (with regulatory text)
  - Updates (tweaks) to:
    - Fact sheet
    - PR Notice 2007-4
    - At-A-Glance Summary
3. Label Implementation
3. Frequently Asked Questions (FAQs)

- In July, EPA posted FAQs on container-containment web site: http://www.epa.gov/pesticides/regulating/containerquestions.htm
- Most address implementation of the label changes, but will add container and containment questions in the future
- Include Q&As on:
  - Does product X or container Y need to have the new label statements?
  - How does EPA define rigid? Dilutable?
  - What label statements should be used if a product is sold in different types/sizes of containers? If a product has both residential and non-residential uses?
  - Can I make the label changes by notification?
  - Can I make other changes to the storage and disposal statement at the same time?
3. New Container Language vs. Existing Storage and Disposal Language

FAQ 15: Does the new container label language (in regs and PR Notice 2007-4) replace the “pesticide storage” and “pesticide disposal” language on labels?

No. The new container language is “container disposal” (or container management) language and independent of the “pesticide storage” and “pesticide disposal” instructions. Labels must include all three kinds of instructions.

FAQ 16: Does the new container label language (in regs and PR Notice 2007-4) replace the existing “container disposal” language?

No. In general, the new container label language adds to the statements currently on the pesticide label. In most cases, the new language should be worked into the existing language.

Need to keep container disposal instructions
3. New Container Language vs. Existing Storage and Disposal Language

Nonrefillable container. Do not reuse or refill this container.

Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.
3. New Container Language vs. Existing Storage and Disposal Language

- **Label Review Manual**
  - Consolidates current requirements & guidance for pesticide labels
  - “Living” document
  - http://www.epa.gov/oppfead1/labeling/lrm/

- **Chapter 13: Storage and Disposal Instructions**
  - Will post an updated version soon
  - Updated version shows how to incorporate new container statements into existing container disposal statements for different types of containers
4. Other Updates
4.A. Rinsing Procedure

- **Residue removal standard in §165.25(f)**
  - Applies to rigid nonrefillable containers, 5-gallons (or 50 pounds) or smaller, holding dilutable products
  - Container/formulation must be capable of attaining 99.99% removal
  - Regs only require test to be conducted and records kept if the products is a flowable concentrate (suspension concentrate) or if EPA requires on case-by-case basis

- **Test procedure “Rinsing Procedures for Dilutable Pesticide Products in Rigid Containers”**
  - Available in docket for 2006 final rule and on web site
  - [http://www.epa.gov/pesticides/regulating/containers.htm](http://www.epa.gov/pesticides/regulating/containers.htm)

- **How should containers with a hollow handle on top be held during the draining period?**
  - Face of the opening (not the face of the container) is directed towards and parallel to the floor
4. Rinsing Procedures

Specific Instructions for draining material from containers with a hollow handle on the top.

Position 1
Timer: 0-5 sec, 10-15 sec & 20-30 sec
- Face of the opening (not face of the container) is directed towards and is parallel to the floor.
- Opposite side as you face the container.
- Handle oriented along a line running left to right and parallel to the floor.

Position 2
Time: 5-10 sec, 15-20 sec
- Rotate clockwise 90 degrees so the face of the opening is perpendicular to the floor.
- Handle on left hand side and perpendicular to the floor.
(Purpose of this is to allow material to drain from the handle to the opening.)
4. Delivery to End User’s Bulk Tank

**Situation:** A pesticide registrant ships a concentrated pesticide directly to a stationary storage tank at a customer's facility. The customer keeps the product in this "tank 1" until the customer is ready to dilute it in a different "tank 2". The diluted product in tank 2 is used as an end product for treating wood; it is not reshipped and is not refilled.

**Question:** Is tank 1 regulated under the pesticide container-containment regulations?

**Answer:** Provided that tank 1 is used only to fill tank 2, and that tank 2 is not intended to contain a pesticide for sale or distribution, tank 1 would not be subject to the nonrefillable container, refillable container, repackaging, or containment requirements in 40 CFR part 165.

- If tank 2 is not intended to contain a pesticide for sale or distribution, then tank 1 is neither a refillable nor a nonrefillable container as those terms are used in part 165 (not for distribution or sale).
- Tank 1 would not be subject to the standards for stationary pesticide containers in 40 CFR 165.45(f), which only apply to stationary pesticide containers larger than the regulatory size thresholds that are located at a refilling establishment operating under contract to a registrant. In this case, the customer is an end user and is not transferring the pesticide from one container to another for sale or distribution.
- Tank 1 would not be subject to the containment requirements because the customer is an end user and, therefore, is not one of the types of facilities that must comply with the containment regulations per §165.80(b).
- Tank 1 must be properly labeled, e.g., see §156.10(a)(4)(ii)(B)
4. Residential “Refillable” Containers

◆ **Examples**
- A registrant sells a residential use product in (1) a 16 oz. trigger spray bottle and (2) a one-gallon container without the trigger sprayer. Consumer can pour the product from the gallon bottle into the trigger spray bottle for use.
- Photos show a similar situation, where the spray bottle can be refilled with a concentrated (different) product and diluted for use.

◆ **Question:** Are the spray bottles refillable or nonrefillable containers under the container-containment regulations?

◆ **Answer:** The spray bottles would be classified as nonrefillable containers under the regulations.
  - Refillable container is defined as "a container that is intended to be filled with pesticide more than once for sale or distribution." This means that the container would be refilled by the manufacturer (or a person acting as an agent of the manufacturer) for sale or distribution multiple times.
  - In these situations, the spray bottles are refilled by the end user for the purposes of using that pesticide. There is no distribution or sale in this situation.
5. Pesticide Container Recycling Rule
5. Pesticide Container Recycling Rule

The Agency has been developing a proposed rule that would mandate plastic pesticide container recycling.

To ensure a rule that protects human health and the environment, EPA has been considering this framework:

- Mandatory for registrants of agricultural & professional specialty pesticides to recycle HDPE from pesticide containers.
- Recycling would be VOLUNTARY for retailers & pesticide users.
- Programs meet ANSI/ASABE container recycling consensus standard.
- Performance-based: Each registrant putting HDPE containers into commerce is responsible for recycling at a minimum recycling rate.
- Implement compliance with ANSI/ASABE standard through third party certification system.
5. Status of Pesticide Container Recycling Rule

Statute Changes/Congressional Action

  - “The recycling of agricultural and specialty pesticide containers is a significant component of the human health and environmental protection goals of the Federal Insecticide, Fungicide and Rodenticide Act. The Committee continues to support EPA’s efforts on recycling but is concerned with the delay in establishing regulations to make recycling a part of the comprehensive effort to ensure the safe use and disposal of pesticide containers. The Committee strongly encourages EPA to adopt pesticide container recycling regulations within 180 days of enactment.”

- 2008 Farm Bill amended FIFRA section 19(a)
  - “(4) CONTAINER RECYCLING.—The Secretary may promulgate a regulation for the return and recycling of disposable pesticide containers used for the distribution or sale of registered pesticide products in interstate commerce. Any such regulation requiring recycling of disposable pesticide containers shall not apply to antimicrobial pesticides (as defined in section 2) or other pesticide products intended for non-agricultural uses.”
5. Status of Pesticide Container Recycling Rule

Proposed Regulations/Regulatory Action

- On April 1, 2008, EPA submitted proposed pesticide container recycling rule to Office of Management and Budget for review.
- On July 3, 2008, OMB returned the draft proposed rule to EPA for further consideration and analysis:
  - OMB acknowledged that illegal and improper disposal of these pesticide containers may create hazards but questioned whether providing the proposed recycling program would result in a meaningful reduction in the improper disposal of these containers.
  - EPA's analysis of the proposed program indicates that the quantified costs imposed by the proposed recycling program would exceed the quantified benefits by more than two orders of magnitude.
  - OMB said that EPA did not analyze other alternatives, including alternatives that may increase net benefits and potentially reduce burdens on small businesses and that EPA should determine whether alternatives exist that would impose the least burden on society and ensure that the benefits of the intended regulation justify its costs.
- The Agency is considering the information provided by OMB and, in the future, will determine next steps for this particular rulemaking effort.
For More Information

- Allie Fields: 703-305-5391
- Nancy Fitz: 703-305-7385
- Jeanne Kasai: 703-308-3240
- David Stangel: 202-564-4162

- E-mail addresses: lastname.firstname@epa.gov

EPA web site

- www.epa.gov/pesticides
- Select “Regulating pesticides”
- Select “Storage and disposal”
- Select “Container and containment regulations”
Appendix: Exemption for Certain Antimicrobial Pesticides

From the Nonrefillable Container, Refillable Container and Repackaging Regulations
Exemption for Certain Antimicrobial Pesticide Products

- **FIFRA Section 19(h)(2)** exempts many antimicrobial products from the pesticide container regulations:
  - A household, industrial, or institutional antimicrobial product that is not subject to regulation under the Solid Waste Disposal Act shall not be subject to the provisions of subsections (a), (e), and (f), unless the Administrator determines that such product must be subject to such provisions to prevent an unreasonable adverse effect on the environment.

- **How is this implemented in the regulations?**
  - What is an antimicrobial product?
  - What is “household, industrial or institutional”?
  - What is “not subject to regulation under RCRA”?
  - When/how would EPA determine that a product must be subject to the rule to prevent an unreasonable adverse effect on the environment.
A. Antimicrobial Product

- FIFRA Section 2(mm) defines “antimicrobial pesticide” as a pesticide that:
  - Is intended to: (1) disinfect, sanitize, reduce or mitigate growth or development of microbiological organisms; or (2) protect inanimate objects, industrial processes or systems, surfaces, water, or other chemical substances from contamination, fouling, or deterioration caused by bacteria, viruses, fungi, protozoa, algae, or slime; and
  - In the intended use is exempt from, or otherwise not subject to, a tolerance under section 408 FFDCA or a food additive regulation under section 409.

- FIFRA Section 2(mm) excludes certain products. The term “antimicrobial pesticide” does not include:
  - A wood preservative or antifouling paint product for which a claim of pesticidal activity other than or in addition to an activity described above is made;
  - An agricultural fungicide product; or
  - An aquatic herbicide product.
A. Antimicrobial Product

- An antimicrobial pesticide product is exempt from the nonrefillable container, refillable container and repackaging regulations if:
  - The product is an antimicrobial pesticide (as defined in FIFRA sec. 2(mm)) OR
  - It has antimicrobial properties (as defined in FIFRA sec. 2(mm)(1)(A)) and is subject to a tolerance or a food additive regulation.
B. Household, Industrial or Institutional Product

- A household, industrial or institutional product has labeling that includes directions for use on a site in at least one of the following antimicrobial product use categories:
  - Food handling/storage establishments premises and equipment
  - Commercial, institutional, and industrial premises and equipment
  - Residential and public access premises
  - Medical premises and equipment
  - Human drinking water systems
  - Materials preservatives
  - Industrial processes and water systems
  - Antifouling coatings
  - Wood preservatives
  - Swimming pools

- What antimicrobial product use categories are not “household, industrial or institutional”?
  - Agricultural premises and equipment
  - Aquatic areas
C. Not Subject to RCRA

◆ What is “not subject to regulation under RCRA”?  
◆ An antimicrobial product that is NOT a hazardous waste as set out in 40 CFR Part 261 when the product is intended to be disposed.

◆ 40 CFR Part 261 – Identification and Listing of Hazardous Waste
  ◆ Defines solid wastes
  ◆ Defines hazardous wastes, e.g. listed wastes, characteristic wastes; and
  ◆ Describes exclusions, e.g., household waste is solid waste but is not a hazardous waste

◆ Types of products that might fail this criteria (based on our analysis & additional info received):
  ◆ Hypochlorites, some wood preservatives, some quats, others?
D. EPA Determination

- EPA may determine that an antimicrobial product otherwise exempted must be subject to the container regulations to prevent an unreasonable adverse effect on the environment (UAE) if:
  - EPA obtains info, data or other evidence of a problem with the containers of a certain product or related group of products;
  - The info, data or other evidence is reliable & factual;
  - The problem causes or could reasonably be expected to cause an UAE; and
  - Complying with the container regulations could reasonably be expected to eliminate the problem.

- EPA could make such a determination by rule or by notification and as a condition of registration.
E. Antimicrobial Exemption: Summary

An antimicrobial pesticide product is exempt from the nonrefillable container, refillable container and repackaging regulations if it satisfies all four of these criteria:

- The product is an antimicrobial pesticide (as defined in FIFRA sec. 2(mm)) or it has antimicrobial properties (as defined in FIFRA sec. 2(mm)(1)(A)) and is subject to a tolerance or a food additive regulation;

- Its label includes directions for use on a site in at least one of the 10 antimicrobial use categories identified as “household, industrial or institutional;”

- It is not a hazardous waste when it is intended to be disposed, as defined in 40 CFR Part 261; and

- EPA has not specifically found that the product must be subject to these provisions to prevent an unreasonable adverse effect on the environment.