Refillable Containers and Secondary Containment Requirements for Agricultural Pesticides in Florida

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Introduction

The federally mandated Pesticide Container and Containment (PCC) Rule governs the selection, maintenance, and use of refillable pesticide containers and the secondary containment of stationary containers and pesticide dispensing areas. The Environmental Protection Agency (EPA) first published the PCC Rule in August 2006, and full compliance has been enforced since August 16, 2011. Regardless of existing regulations, all states are required to follow the PCC Rule, which affects pesticide retailers, distributors, commercial applicators, custom blenders, refillers, and registrants. The EPA oversees and conducts enforcement of the rule through state pesticide control officials, and monetary penalties can be enforced for violations. The Florida Department of Agriculture and Consumer Services (FDACS) is involved in violation investigations and will take action or forward the findings to the EPA for determination and action. In Florida, the Department of Environmental Protection (FDEP) enforces the rule for stationary aboveground storage tanks with capacities greater than 550 gallons.

Refillable Container Rules

According to the PCC Rule, portable refillable containers used for pesticides must meet the following requirements:

- Serial numbers, ID codes, or other unique methods of identification must be visible.
- DOT design, construction, and marking requirements must be met.
- There are no size limits (except those in place by registrants) for refillable containers.
- Containers must be cleaned between uses, unless tamper evident or one-way valves are intact and filled with the same product.
- Containers must be on an approved list from the registrant.
- Refillers must have registrant’s cleaning instructions and repackaging authorization on hand.
- EPA establishment number (EPA Est. #) and net contents must be on the product label affixed to the tank.
- Container integrity is the responsibility of both the refiller and the registrant.
- Refillers must keep records for each inspection and fill.

Existing portable refillable pesticide containers that do not meet these requirements will become obsolete.

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Secondary Containment Rules

Liquid Pesticide Containment

Liquid pesticide storage tank systems with individual storage tank capacities greater than 550 gallons are regulated by the Florida Department of Environmental Protection (for more information, see http://www.dep.state.fl.us/waste/quick_topics/rules/documents/62-762.pdf). Secondary containment standards applicable to containers of liquid pesticides are stipulated under the existing rule in Florida and will continue to be enforced by FDEP. The EPA recently adopted new standards relevant to secondary containment of containers of dry pesticides and containment pads of liquid and dry pesticides. These standards are required by the EPA and not enforced under the existing Florida rule. Facilities and establishments that must comply with the new EPA regulations include (1) refilling establishments that repackage agricultural pesticides and whose principal business is retail sale, (2) custom blenders of agricultural pesticides, and (3) businesses that apply an agricultural pesticide for compensation.

Dry Pesticide Containment

Stationary containers are defined as refillable containers remaining for 30 consecutive days or longer. If a stationary container holds 4,000 lbs or more of dry agricultural pesticides, it is subject to the following provisions. Also, dispensing facilities must have secondary containment units that comply with these design requirements:

- Must be protected from wind and precipitation.
- Must be placed on pallets or a raised concrete platform to prevent accumulation of water in or under the pesticide.
- Storage areas for the stationary containers of dry pesticides must include a floor that extends completely beneath the pallets or raised concrete platforms that hold the stationary dry pesticide containers.
- Must be enclosed by a minimum of a 6-inch high curb that extends at least 2 feet beyond the perimeter of the container.

Pesticide Dispensing Areas

Pesticide dispensing areas must have a compliant containment pad if any of the following takes place in the area:

- Refillable containers of agricultural pesticides are emptied, cleaned, or rinsed.
- Agricultural pesticides are dispensed from a stationary container designed to hold undivided quantities of agricultural pesticides greater than 4,000 lbs of dry pesticides.
- Agricultural pesticides are dispensed from a transport vehicle for purposes of filling a refillable container.
- Agricultural pesticides are dispensed from any other container for the purpose of refilling a refillable container for sale or distribution.

EXEMPTIONS

- The pesticide in the dispensing area is gaseous when released at atmospheric temperature or pressure.
- The pesticide containers refilled or emptied within the dispensing area are stationary containers that are already protected by a secondary containment unit in accordance with existing regulations.
- The pesticide dispensing area is used solely for dispensing pesticide from a rail car that remains at the facility less than 30 consecutive days.

Requirements for new containment pads in dispensing areas (those installed after November 16, 2006) can vary from existing containment pads in dispensing areas (those installed before November 16, 2006). The requirements for both new and existing containment pads are listed below.

CAPACITY AND SPECIFIC DESIGN REQUIREMENTS FOR NEW CONTAINMENT PADS IN PESTICIDE DISPENSING AREAS

New containment pads in pesticide dispensing areas must meet the following criteria:

- Must have a holding capacity of at least 750 gallons or 100 percent of the volume of the largest pesticide container or pesticide-holding equipment used on the pad.
- Must be designed and constructed to intercept leaks and spills of pesticides that may occur in the dispensing area.
- Must have enough surface area to extend completely beneath any container on it, with one exception. If transport vehicles are dispensing pesticides into a stationary pesticide container, then at least the portion of the vehicle where the delivery hose or device attaches to the vehicle must be accommodated by the surface area of the containment pad.
• In conjunction with its sump, must allow for removal and recovery of spilled, leaked, or discharged material and rainfall. For example, manually activated pumps that lack automatic overflow cutoff switches are prohibited.

• Must have a sloped surface toward an area where liquids can be collected for removal, such as a liquid-tight sump or a depression in the case of a single-pour concrete pad.

CAPACITY AND SPECIFIC DESIGN REQUIREMENTS FOR EXISTING CONTAINMENT PADS IN PESTICIDE DISPENSING AREAS

• Capacity requirements for existing containment pads are the same for new containment pads (listed above).

• Existing pads must comply with all of the above listed design requirements except existing pads are not required to have their surface sloped toward an area where liquids can be collected for removal.

Construction Material Requirements

Dry pesticide containment and pesticide dispensing areas as well as new and existing containment structures have the same construction material requirements:

• Must be constructed of steel, reinforced concrete, or other rigid material capable of withstanding the full hydrostatic head, load, and impact of pesticides, precipitation, other substances, equipment, and appurtenances placed within the structure. The structure must be liquid-tight with sealed cracks, seams, and joints.

• Must not be constructed of natural earthen material, unfired clay, or asphalt.

• Must be made of materials compatible with the pesticides stored.

General Design Requirements

Requirements listed below are applicable to both dry pesticides containment and pesticide dispensing areas.

REQUIREMENTS FOR NEW CONTAINMENT PADS

• Pesticide containers and appurtenances must be protected against damage from operating personnel and moving equipment. Appropriate protection includes but is not limited to sagging prevention support, flexible connections, and the use of guard rails, barriers, and protective cages.

• Appurtenances, discharge outlets, or gravity drains must not be configured through the base or wall of the containment structure, except for direct interconnections between adjacent containment structures that meet requirements.

• Appurtenances must be configured so leaks are easily visible.

• Containment structures must be constructed with sufficient freeboard to contain precipitation and to prevent liquids from seeping into adjacent land or structures.

• Multiple stationary pesticide containers may be protected by a single secondary containment unit.

REQUIREMENTS FOR EXISTING CONTAINMENT PADS

• Requirements are the same as those listed above for new containment pads, except that appurtenances, discharge outlets, and gravity drains configured through the base or wall of the containment structure are allowed, but must be sealed.

Operational, Inspection, and Maintenance Requirements

Requirements listed below are applicable to both dry pesticides containment and pesticide dispensing areas. Owners and operators of both new and existing pesticide containment structures must comply with the following:

• Manage the dry pesticide containment and pesticide dispensing areas in a manner that prevents pesticides or pesticide-containing materials from escaping the containment structure.

• Ensure pesticide leaks and spills in or on any containment structure are collected and recovered in a manner that ensures protection of human health and the environment.

• Make maximum practicable recovery of the leaked or spilled pesticides. Cleanup of spills must occur no later than the end of each day on which the spill or leak occurred, except when a reasonable delay would significantly reduce the likelihood or severity of adverse effects to human health and the environment.

• Ensure the label instructions and applicable federal, state, and local laws and regulations are followed for the particular pesticide or pesticide-containing materials resulting in leaks and spills.

Archival copy: for current recommendations see http://edis.ifas.ufl.edu or your local extension office.
• Ensure that transfers of pesticides between containers or between containers and transport vehicles are attended at all times.

• Inspect each stationary pesticide container, its appurtenances, and each containment structure for visible signs of wetting, discoloration, blistering, bulging, corrosion, cracks, or other signs of damage or leakage at least monthly during times when pesticides are being stored and dispensed on the containment structure.

• Initiate repairs on any areas showing visible signs of damage. Cracks and gaps must be sealed in the containment structures or appurtenances with material compatible with the pesticide being stored or dispensed no later than the end of the day when it was noticed and completed within a reasonable timeframe. If the structure fails to meet the requirements, no additional pesticide can be stored on the containment structure until the appropriate repairs have been made.

**Recordkeeping Requirements**

The requirements listed below are applicable to both dry pesticides containment and pesticide dispensing areas. Facility owners and operators must maintain the following records and are required to furnish these records if an EPA representative requests them during an inspection.

1. Each containment structure and each stationary pesticide container and its apparatus must have records of inspection and maintenance kept for 3 years. Records should include the following:

   • Name of the person conducting the inspection or maintenance

   • Date the inspection or maintenance was conducted

   • Conditions noted

   • Specific maintenance performed

   • Records for any non-stationary container holding undivided quantities of agricultural pesticides greater than or equal to 4,000 lbs of dry pesticide, but is not protected by a secondary containment unit meeting the new EPA containment unit regulations. (These records must be kept for 3 years.)

2. Records of the construction date of the containment structure must be kept for as long as the pesticide containment structure is in use and for 3 years afterwards.

**Additional Information**
