

Pesticide Containment Regulations: What You Need to Know

On August 17, 2009, applicable agricultural pesticide containment structures in Maryland will be subject to compliance with the containment structure requirements set forth in EPA's Pesticide Container – Containment Rule. These requirements were developed to protect the environment from agricultural pesticide releases at applicable bulk storage sites and also from agricultural pesticide spills and leaks resulting from applicable pesticide refilling and dispensing operations. This protection is achieved by the construction of secondary containment units or pads at certain facilities handling agricultural pesticides.

This brochure is provided to identify who is subject to the containment regulations and to provide information regarding the specific requirements associated with those regulations.

What two conditions will result in me having to comply with the pesticide containment requirements set forth in EPA's Pesticide Container – Containment Rule?



First, if I own or operate one of the following:

- ❑ An agricultural pesticide refilling establishment that repackages such pesticides and whose main business is retail sale (i.e., greater than 50% of total annual revenue generated from retail sales).
- ❑ An agricultural pesticide custom blending operation.
- ❑ A business which applies an agricultural pesticide for compensation (commercial pesticide applicator).

Second, I engage in either or both of the following:

- ❑ The storage of agricultural pesticides in stationary containers designed to hold undivided quantities of agricultural pesticides equal to or greater than 500 gallons of liquid pesticide or equal to or greater than 4,000 pounds of dry pesticide.
- ❑ The dispensing of agricultural pesticides from:

- refillable containers of agricultural pesticides that are being emptied, cleaned or rinsed.
- stationary pesticide containers designed to hold undivided quantities of agricultural pesticides equal to or greater than 500 gallons of liquid pesticide or equal to or greater than 4,000 pounds of dry pesticide for any purpose, including refilling or emptying for cleaning.
- transport vehicles used to refill a refillable container.
- any other container used to refill a refillable container for sale or distribution.

What containment requirements are associated with those agricultural pesticide storage operations which are subject to compliance with these containment regulations?

- ❑ Secondary containment must exist for all applicable stationary pesticide containers except for:
 - empty containers.
 - containers holding only pesticide rinsates or wash water and if accordingly labeled.
 - containers holding pesticides which would be gaseous when released at atmospheric temperature and pressure.
 - containers dedicated to non-pesticide use and if accordingly labeled.

According to this rule, what constitutes a stationary pesticide container?

- ❑ One which is fixed at a single facility or establishment.
- ❑ One which, if not fixed, remains at a single facility or establishment for at least 30 consecutive days, and that which holds pesticide during that entire time.

What pesticide dispensing areas are subject to the requirements set forth in the containment regulations?

- ❑ Areas in which refillable containers of agricultural pesticides are emptied, cleaned or rinsed.
- ❑ Areas in which agricultural pesticides are dispensed from a stationary pesticide container designed to hold undivided quantities of agricultural pesticides equal to or greater than 500 gallons of liquid pesticide or equal to or greater than 4,000 pounds of dry pesticide for any purpose, including refilling or emptying for cleaning. This applies when pesticide is dispensed from the container into any vessel, including, but not limited to:

- refillable containers.
- service containers.
- transport vehicles.
- application equipment.

- ❑ Areas in which agricultural pesticides are dispensed from a transport vehicle for purposes of filling a refillable container.
- ❑ Areas in which agricultural pesticides are dispensed from any other container for the purpose of refilling a refillable container for sale or distribution. Container requirements do not apply if the agricultural pesticide is dispensed from such a container for use, application or purposes other than refilling for sale or distribution.

What pesticide dispensing areas are exempt from the containment regulations?

- ❑ A pesticide dispensing area in which the only pesticides present would be gaseous when released at atmospheric temperature and pressure.
- ❑ A pesticide dispensing area in which the only pesticide containers refilled or emptied are stationary pesticide containers which are already protected by a secondary containment unit that meets the requirements of this rule.
- ❑ A pesticide dispensing area which is used solely for dispensing pesticide from a rail car which does not remain at a facility long enough (30 days) to meet the definition of a stationary pesticide container.

For the containment regulations, what qualifies as an existing containment structure and what qualifies as a new containment structure (Note: Containment structures include secondary containment units and containment pads)?

- ❑ An existing containment structure is one for which installation began on or before November 16, 2006.
- ❑ A new containment structure is one for which installation began after November 16, 2006 and for which certain conditions regarding permits, construction and contracts are met.

What construction materials must be used in the case of existing containment structures and new containment structures?

- ? In both cases, the containment structure must be constructed of steel, reinforced concrete or other rigid material capable of withstanding the full hydrostatic head, load and impact of any

pesticides, precipitation, other substances, equipment and appurtenances placed within the structure. The structure must be liquid-tight with cracks, seams and joints appropriately sealed.

- ❑ In both cases, the containment structure must not be constructed of natural earthen material, unfired clay, or asphalt.
- ❑ In both cases, the containment structure must be made of materials compatible with the pesticide stored. That is, the construction materials must be able to withstand anticipated exposure to stored or transferred substances and still provide containment of those same or other substances within the containment area.

What are the general design requirements common to both existing and new containment structures? How do the requirements differ?

- ❑ In both cases, all appurtenances (e.g., container hoses, fittings, plumbing, valves, gauges, pumps, metering devices, etc.) and pesticide containers must be protected against damage from operating personnel and moving equipment. Such means of support may include, but are not limited, supports to prevent sagging, flexible connections, the use of guard rails, barriers and protective cages.
- ❑ In both cases, the containment structure must be constructed with sufficient freeboard to contain precipitation and prevent water and other liquids from seeping into or flowing onto it from adjacent land or structures.
- ❑ In both cases, multiple stationary pesticide containers may be protected within a single secondary containment unit.
- ❑ In the case of an existing containment structure, all appurtenances, discharge outlets and gravity drains through the base or wall of the containment structure must be sealed, except for direct interconnections between adjacent containment structures which meet the requirements of the containment regulations.
- ❑ In the case of a new containment structure, appurtenances, discharge outlets or gravity drains must not be configured through the base or wall or wall of the containment structure, except for direct interconnections between adjacent containment structures which meet the requirements of the containment regulations. Appurtenances must be configured in such a way that spills or leaks are easy to see.

What are the specific design requirements for new and existing stationary liquid pesticide containment?

- ❑ Each stationary liquid pesticide container that is protected by a new or existing secondary containment unit must be anchored or elevated to prevent flotation in the event that the secondary containment unit fills with liquid.

What are the capacity requirements for liquid pesticide containment and containment pads in pesticide dispensing areas?

- ❑ For an existing containment unit, it must have a capacity of at least 100 percent of the volume of the largest stationary pesticide container plus the volume displaced by other containers and appurtenances within the unit.
- ❑ For a new secondary containment unit with stationary liquid pesticide containers which are protected from precipitation, it must have a capacity of at least 100 percent of the volume of the largest stationary pesticide container plus the volume displaced by other containers and appurtenances within the unit.
- ❑ For a new secondary containment unit with stationary liquid pesticide containers which are exposed to or are unprotected from precipitation, it must have a capacity of at least 110 percent of the volume of the largest stationary pesticide container plus the volume displaced by other containers and appurtenances within the unit.
- ❑ Existing and new containment pads in pesticide dispensing areas which have a pesticide container or pesticide-holding equipment with a volume of 750 gallons or greater must have a holding capacity of at least 750 gallons.
- ❑ Existing and new containment pads in pesticide dispensing areas which do not have a pesticide container or pesticide-holding equipment with a volume of at least 750 gallons or greater must have a holding pad capacity of at least 100 percent of the volume of the largest pesticide container or pesticide-holding equipment used on the pad.

What specific design requirements are common to both existing and new containment pads in pesticide dispensing areas?

- ❑ Such pads must be designed to intercept leaks and spills of pesticides which may occur in the pesticide dispensing area.
- ❑ Any such pad must have enough surface area to extend completely beneath any container on it, with the exception of transport vehicles dispensing

pesticide for sale or distribution to a stationary pesticide container. For such vehicles, the surface area of the containment pad must accommodate at least the portion of the vehicle where the delivery hose or device couples to the vehicle. This exception does not apply to transport vehicles that are used for prolonged storage or repeated on-site dispensing of pesticides.

- ❑ Allow, in conjunction with its sump, for removal and recovery of spilled, leaked, or discharged material and rainfall, such as by a manually activated pump. Automatically-activated pumps which lack automatic overflow cutoff switches for the receiving container are prohibited.

What additional specific design requirement exists for a new containment pad in a pesticide dispensing area?

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

What specific design requirements are common to both existing and new stationary dry pesticide containment?

- ❑ Each stationary dry pesticide container within the containment unit must be protected from wind and precipitation.
- ❑ Each stationary dry pesticide container must be placed on pallets or a raised concrete platform to prevent the accumulation of water in or under the pesticide.
- ❑ The storage area for stationary containers of dry pesticide must include a floor that extends completely beneath the pallets or raised concrete platforms on which the stationary dry pesticide containers must be stored.
- ❑ The storage area for stationary containers of dry pesticide must be enclosed by a curb a minimum of 6 inches high that extends at least 2 feet beyond the perimeter of the container.

What operating procedures must the owner or operator of a new or existing containment structure follow to comply with the containment regulations?

- ❑ Manage the structure in a manner that prevents pesticides or materials containing pesticides from escaping from the containment structure (including, but not limited to, pesticide residues washed off the containment structure by rainfall or cleaning liquids used within the structure).

- ❑ Ensure that pesticide spills and leaks on or in any containment structure are collected and recovered in a manner that ensures protection of human health and the environment (including surface water and ground water) and maximum practicable recovery of the pesticide spilled or leaked. Cleanup must occur no later than the end of each day on which pesticides have been spilled or leaked except in circumstances where a reasonable delay would significantly reduce the likelihood or severity of adverse effects to human health and the environment.
- ❑ Ensure that all materials resulting from spills or leaks and any materials containing pesticide residue are managed according to label instructions and applicable Federal, State and local laws and regulations.
- ❑ Ensure that transfers of pesticide between containers, or between containers and transport vehicles are attended at all times.
- ❑ Ensure that each lockable valve on a stationary pesticide container, if it is required by the refillable container standards listed in the Container – Containment Rule, is closed and locked whenever the facility is unattended.

What are the inspection and maintenance requirements for an owner or operator of each new and/or existing containment structure?

- ❑ Each stationary pesticide container and its appurtenances and each containment structure must be inspected at least monthly whenever pesticides are being stored or dispensed on the containment structure. Each inspection must involve an examination for visible signs of wetting, discoloration, blistering, bulging, corrosion, cracks or other signs of damage or leakage.
- ❑ Any areas showing visible signs of damage must have repairs initiated and any cracks and gaps in the containment structure or appurtenances must be sealed with material compatible with the pesticide being stored or dispensed no later than the end of the day on which damage is noticed. Complete repairs must be affected within a time frame that is reasonable and which takes into account the availability of cleanup materials, trained staff, and equipment.
- ❑ Not store any additional pesticide on a containment structure if the structure fails to meet the requirements of the containment regulations until suitable repairs have been made.

If all applicable requirements of these regulations are met, may a containment pad and a secondary containment unit be combined?

- ❑ Yes, the containment pad and a secondary containment unit may be combined as an integrated system provided that all applicable requirements for each are satisfied separately.

What recordkeeping do I have to do as a facility owner or operator to comply with the containment regulations?

- ❑ Records of inspection and maintenance for each containment structure and for each stationary pesticide container and its appurtenances must be kept for 3 years and must include the following information:
 - 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 pesticide container designed to hold undivided pesticides equal to or greater than 500 gallons of liquid pesticide or equal to or greater than 4,000 pounds of dry pesticide that holds pesticides but is not protected by a secondary containment unit meeting these containment regulations must be kept for 3 years. Records on these non-stationary pesticide containers must include the time period that the container remains at the same location.
- ❑ 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.
- ❑ All such records must be furnished for inspection and copying upon request by an authorized representative from the Maryland Department of Agriculture.

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