



**US Environmental Protection Agency  
Office of Pesticide Programs**

**Table 7: Standards for Containment  
Structures (40 CFR Part 165 Subpart E)**

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Short Description	Reg Cite	Requirement
<b>SCOPE AND APPLICABILITY</b>		
Who must comply	165.80(b)	<ul style="list-style-type: none"> <li>• Refilling establishments whose principal business is retail sale</li> <li>• Custom blenders</li> <li>• Commercial applicators</li> </ul>
Pesticides that must comply	165.80(b)	Agricultural pesticides
Stationary containers that are subject	165.81(a) & (b)	Stationary pesticide containers <sup>1</sup> in affected facilities must have secondary containment except for: <ul style="list-style-type: none"> <li>• Empty containers;</li> <li>• Containers holding only rinsate or wash water and so labeled;</li> <li>• Containers holding pesticides which are gaseous at atmospheric temperature and pressure; and</li> <li>• Containers dedicated to non-pesticide use and so labeled.</li> </ul>
Pesticide dispensing areas that are subject	165.82(a)	Dispensing areas in affected facilities must have containment pads if: <ul style="list-style-type: none"> <li>• Refillable containers of agricultural pesticide are emptied, cleaned or rinsed;</li> <li>• Agricultural pesticides are dispensed from a stationary container designed to hold undivided quantities of agricultural pesticides equal to or greater than 500 gallons liquid or 4,000 pounds dry for any purpose;</li> <li>• Agricultural pesticides are dispensed from a transport vehicle for purposes of refilling a refillable container; or</li> <li>• Agricultural pesticides are dispensed from any other container for the purpose of refilling a refillable container for sale or distribution.</li> </ul>
Define existing structure	165.83(b)	An existing containment structure is a structure for which installation began on or before November 16, 2006.
Define new structure	165.83(a)	A new containment structure is a structure for which installation began after November 16, 2006 if certain conditions regarding permits, construction and contracts are met.
<b>COMPLIANCE DATE</b>		
Compliance date	165.80(c)	As of August 17, 2009 all containment structures must comply with the specific standards applicable to them.

<b>GENERAL STANDARDS FOR NEW STRUCTURES</b>		
Material	165.85(a)	<ul style="list-style-type: none"> <li>• Containment structures must be constructed of steel, reinforced concrete or other rigid material capable of withstanding the full hydrostatic head and load of any substances, equipment and appurtenances placed on the structure and must be compatible with the pesticides stored.</li> <li>• The structure must be liquid-tight with cracks, seams and joints sealed.</li> <li>• Natural earthen material, unfired clay and asphalt are prohibited.</li> </ul>
Protect appurtenances	165.85(b)(1)	Appurtenances <sup>2</sup> and containers must be protected against damage from personnel and moving equipment.
Configuration of drains	165.85(b)(2)	<ul style="list-style-type: none"> <li>• Appurtenances, discharge outlets or drains must not be configured through the base or wall except for direct connections between containment structures.</li> <li>• Appurtenances must be configured so leaks are easy to see.</li> </ul>
Stormwater control	165.85(b)(3)	All containment structures must be constructed with sufficient freeboard to contain precipitation and prevent water and other liquids from seeping into or flowing onto them from adjacent land or structures.
<b>CAPACITY STANDARDS FOR NEW STRUCTURES</b>		
Capacity: liquids	165.85(c)(1) & (2)	New secondary containment units must have a capacity of 110% (for outdoor) or 100% (for indoor) of the largest stationary container plus the displaced volume of other tanks and appurtenances.
Capacity: pads	165.85(c)(3) & (4)	All containment pads must have a capacity of: (1) 750 gallons; or (2) 100% of the capacity of the largest container or equipment used on the pad (if no container or equipment on the pad exceeds 750 gallons).
<b>SPECIFIC STANDARDS FOR NEW SECONDARY CONTAINMENT FOR LIQUID PESTICIDES</b>		
Flotation prevention	165.85(d)	Stationary containers of liquid pesticides must be anchored or elevated to prevent flotation.
<b>SPECIFIC STANDARDS FOR NEW PADS</b>		
Pad design	165.85(e)	<p>New containment pads must:</p> <ul style="list-style-type: none"> <li>• be designed to intercept leaks and spills;</li> <li>• have enough surface area to extend under containers on it;</li> <li>• must accommodate at least the portion of the vehicle where the hose or device couples to it, for transport vehicles delivering pesticide;</li> <li>• allow for removal/recovery of spilled, leaked or discharged material and rainfall;</li> <li>• have no automatic pumps without overflow cutoffs;</li> <li>• have a surface sloped to a watertight sump or depression.</li> </ul>

<b>SPECIFIC STANDARDS FOR NEW SECONDARY CONTAINMENT FOR DRY PESTICIDES</b>		
Protection from precipitation	165.85(f)	<ul style="list-style-type: none"> <li>• Stationary containers of dry pesticides must:</li> <li>• be protected from wind and precipitation;</li> <li>• be on pallets or raised concrete platforms;</li> <li>• have a floor that extends completely beneath the pallets or raised concrete platforms;</li> <li>• be enclosed by a curb a minimum of 6 inches high that extends at least 2 feet beyond the perimeter of the container.</li> </ul>
<b>GENERAL STANDARDS FOR EXISTING STRUCTURES<sup>3</sup></b>		
Material	165.87(a)	<ul style="list-style-type: none"> <li>• Containment structures must be constructed of steel, reinforced concrete or other rigid material capable of withstanding the full hydrostatic head and load of any substances, equipment and appurtenances placed on the structure and must be compatible with the pesticides stored.</li> <li>• The structure must be liquid-tight with cracks, seams and joints sealed.</li> <li>• Natural earthen material, unfired clay and asphalt are prohibited.</li> </ul>
Protect appurtenances	165.87(b)(1)	Appurtenances and containers must be protected against damage from personnel and moving equipment.
Configuration of drains	165.87(b)(2)	Appurtenances, discharge outlets or drains through the base or wall must be sealed, except direct connections between containment structures.
Stormwater control	165.87(b)(3)	All containment structures must be constructed with sufficient freeboard to contain precipitation and prevent water and other liquids from seeping into or flowing onto them from adjacent land or structures.
<b>CAPACITY STANDARDS FOR EXISTING STRUCTURES<sup>3</sup></b>		
Capacity: liquids	165.87(c)(1)	Existing secondary containment units must have a capacity of 100% (for indoor or outdoor) of the largest stationary container plus the displaced volume of other tanks and appurtenances.
Capacity: pads	165.87(c)(2) & (3)	All containment pads must have a capacity of 750 gallons; or (2) 100% of the capacity of the largest container or equipment used on the pad (if no container or equipment on the pad exceeds 750 gallons).
<b>SPECIFIC STANDARDS FOR EXISTING SECONDARY CONTAINMENT FOR LIQUID PESTICIDES</b>		
Flotation prevention	165.87(d)	Stationary containers of liquid pesticides must be anchored or elevated to prevent flotation.

<b>SPECIFIC STANDARDS FOR EXISTING PADS<sup>3</sup></b>		
Pad design	165.87(e)	Existing containment pads must: <ul style="list-style-type: none"> <li>• be designed to intercept leaks;</li> <li>• have enough surface area to extend under containers on it;</li> <li>• must accommodate at least the portion of the vehicle where the hose or device couples to it, for transport vehicles delivering pesticide;</li> <li>• allow for removal/recovery of spilled, leaked or discharged material and rainfall;</li> <li>• have no automatic pumps without overflow cutoffs.</li> </ul>
<b>SPECIFIC STANDARDS FOR EXISTING SECONDARY CONTAINMENT FOR DRY PESTICIDES</b>		
Protection from precipitation	165.85(f)	Stationary containers of dry pesticides must: <ul style="list-style-type: none"> <li>• be protected from wind and precipitation;</li> <li>• be on pallets or raised concrete;</li> <li>• have a floor that extends completely beneath the pallets or raised concrete platforms;</li> <li>• be enclosed by a curb a minimum of 6 inches high that extends at least 2 feet beyond the perimeter of the container.</li> </ul>
<b>STANDARDS FOR ALL STRUCTURES</b>		
Operational	165.90(a)	The owner/operator must: <ul style="list-style-type: none"> <li>• Prevent pesticides from escaping the structure;</li> <li>• Clean up spills no later than the end of the day of occurrence except in circumstances where a reasonable delay would significantly reduce the likelihood or severity of adverse effects to human health or the environment;</li> <li>• Manage spilled and leaked materials according to the label and all regulations;</li> <li>• Ensure that transfers of pesticides are attended.</li> <li>• Lock valves (if required) on stationary pesticide containers or lock the facility, whenever the facility is unattended.</li> </ul>
Inspection	165.90(b)(1)	The owner/operator must inspect each container and its appurtenances and each containment structure monthly during periods when pesticides are being stored or dispensed on the containment structure.
Maintenance	165.90(b)(2) & (3)	The owner/operator must initiate repair to any areas showing damage and must seal cracks and gaps no later than the end of the day on which damage is noticed and complete repairs within a reasonable time frame, taking into account factors such as the weather, and the availability of cleanup materials, trained staff and equipment. Additional pesticides cannot be stored until repairs have been made.
Integrated systems	165.92	Containment pads and secondary containment units may be combined as integrated systems if the requirements for each are satisfied.

Recordkeeping	165.95	<p>The owner/operator must maintain the following records for 3 years:</p> <ul style="list-style-type: none"> <li>• Name of person conducting inspection or maintenance and date;</li> <li>• Conditions noted and specific maintenance performed;</li> <li>• Records of how long non-stationary tanks (with the specified capacities) remain at the facility;</li> <li>• Record of the construction date of the structure (for as long as the structure is in use and for 3 years afterwards).</li> </ul>
<b>STATES WITH EXISTING CONTAINMENT PROGRAMS</b>		
Option to continue implementing State containment regulations	165.97	<ul style="list-style-type: none"> <li>• States that have already published containment regulations and that have primary enforcement responsibility and/or certification programs have the option of continuing to implement their own programs in lieu of these federal containment regulations.</li> <li>• States may request authority to continue implementing containment regulations by submitting a letter and supporting documentation showing that the State's program is at least as environmentally protective as these federal regulations.</li> <li>• EPA will determine whether the State's program is adequate to provide at least equivalent environmental protection and will inform the State of that determination.</li> </ul>

Notes

1. A stationary pesticide container is defined as a refillable container that is fixed at a single facility or establishment or, if not fixed, remains at the facility or establishment for at least 30 consecutive days, and that holds pesticide during the entire time. Stationary pesticide containers are subject to the regulations if they are designed to hold undivided quantities of pesticides equal to or greater than 500 gallons (1,890 liters) for liquids or 4,000 pounds (1,818 kilograms) for dry pesticides.
2. Appurtenance is defined as any equipment or device which is used for the purpose of transferring a pesticide from a stationary pesticide container or to any refillable container, including but not limited to, hoses, fittings, plumbing, valves, gauges, pumps and metering devices.
3. Several of the requirements for existing standards are slightly different from the requirements for new standards. These are requirements which would entail minimal cost when incorporated into construction of new structures, but which would be expensive to retrofit into existing structures and which would not have measurable environmental benefit.