**Section 219.120 Control Requirements for Storage Containers of VOL**

a) Every owner or operator storing VOL in a vessel of 40,000 gallons or greater with a maximum true vapor pressure equal to 0.75 psia but less than 11.1 psia shall reduce VOM emissions from storage tanks, reservoirs, or other containers as follows:

1) Each fixed roof tank shall be equipped with an internal floating roof that meets the following specifications or that is equipped with a vapor control system that meets the specifications contained in subsection (a)(4) below:

A) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

B) Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank;

ii) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous; or

iii) A mechanical shoe seal, which is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

C) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

D) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

E) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

F) Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

G) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

H) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2) During the next scheduled tank cleaning or before March 15, 2004, whichever comes first, each internal floating roof tank shall meet the specifications set forth in subsections (a)(1)(A) through (H) above.

3) Each external floating roof tank shall meet the following specifications:

A) Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

i) Except as provided in Section 219.127(b)(4) of this Subpart, the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall and shall be either a liquid mounted seal or a shoe seal.

ii) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in Section 219.127(b)(4) of this Subpart.

iii) The tank shall be equipped with the closure device after the next scheduled tank cleaning, but no later than March 15, 2004.

B) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e, no visible gap) except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Automotive bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

C) The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

4) A closed vent system and control device respectively shall meet the following specifications:

A) The closed vent system shall be designed to collect all VOM vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in 40 CFR 60.485(c), incorporated by reference at Section 219.112(d) of this Part.

B) The control device shall be designed and operated to reduce inlet VOM emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements of 40 CFR 60.18, incorporated by reference at Section 219.112(d) of this Part.

5) An alternative emission control plan equivalent to the requirements of subsection (a)(1), (a)(2), (a)(3), or (a)(4) above that has been approved by the Agency and the USEPA in a federally enforceable permit or as a SIP revision.

b) The owner or operator of each storage vessel with a design capacity equal to or greater than 40,000 gallons which contains VOL that, as stored, has a maximum true vapor pressure greater than or equal to 11.1 psia shall equip each storage vessel with a closed vent system and control device as specified in subsection (a)(4) above.

c) Notwithstanding subsection (b) of this Section, where an owner or operator can demonstrate that the control device installed on a storage vessel on or before December 31, 1992, was designed to reduce inlet VOM emissions by greater than or equal to 90 percent but less than 95 percent, the control device shall be operated to reduce inlet VOM emission by 90 percent or greater.

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