

### § 153.353

(b) Prevent precipitation from entering the vent system.

### § 153.353 High velocity vents.

The discharge point of a B/3 or 4m venting system must be located at least 3m (approx. 10 ft) above the weatherdeck or walkway if:

(a) The discharge is a vertical, unimpeded jet;

(b) The jet has a minimum exit velocity of 30 m/sec (approx. 98.4 ft/sec); and

(c) The high velocity vent has been approved by Commandant (CG-ENG).

[CGD 78-128, 47 FR 21208, May 17, 1982, as amended by CGD 82-063b, 48 FR 4782, Feb. 3, 1983]

### § 153.354 Venting system inlet.

A venting system must terminate in the vapor space above the cargo when the tank is filled to a 2 percent ullage and the tankship has no heel or trim.

### § 153.355 PV venting systems.

When Table 1 requires a PV venting system, the cargo tank must have a PV valve in its vent line. The PV valve must be located between the tank and any connection to another tank's vent line (such as a vent riser common to two or more tanks).

### § 153.358 Venting system flow capacity.

(a) The cross-sectional flow area of any vent system segment, including any PV or SR valve, must at no point be less than that of a pipe whose inside diameter is 6.4 cm (approx. 2.5 in.).

(b) When Table 1 requires a closed or restricted gauging system, calculations must show that, under conditions in which a saturated cargo vapor is discharged through the venting system at the maximum anticipated loading rate, the pressure differential between the cargo tank vapor space and the atmosphere does not exceed 28 kPa gauge (approx. 4 psig), or, for independent tanks, the maximum working pressure of the tank.

### § 153.360 Venting system restriction.

A venting system must have no assembly that could reduce its cross-sectional flow area or flow capacity to less than that required in § 153.358.

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### § 153.361 Arrangements for removal of valves from venting systems having multiple relief valves.

A venting system having multiple relief valves may be arranged to allow the removal of a valve (for repair, as an example) provided the venting system:

(a) Has valves that are interlocked, so that the removal of a valve does not reduce the venting system relieving capacity below the minimum relieving capacity required by § 153.358; and

(b) Is arranged so that cargo vapor will not escape through the opening left after a valve has been removed.

[CGD 78-128, 47 FR 21208, May 17, 1982; 47 FR 27293, June 24, 1982]

### § 153.362 Venting system drain.

Unless a cargo vent system at every point is level or slopes back to the cargo tank under all conditions of heel and trim allowed under § 153.806, the cargo vent system must have a drain valve at each low point (trap) in the vent line.

### § 153.364 Venting system supports.

Supports for a vent system must meet § 38.10-10(c) of this chapter.

### § 153.365 Liquid overpressurization protection.

(a) Except as noted in paragraph (b) of this section, a containment system requiring closed or restricted gauging must:

(1) Be designed to withstand the maximum pressure that develops during an overflow of the densest cargo endorsed for the containment system; or

(2) Have an overflow control system that meets § 153.408; or

(3) Meet the requirements specified by the Commandant (CG-ENG).

(b) A containment system requiring restricted gauging, except for those cargoes that reference §§ 153.525 or 153.527, may be equipped with a spill valve that:

(1) Meets ASTM F 1271 (incorporated by reference, see § 153.4); and

(2) Limits the maximum pressure during liquid overflow at a specified cargo loading rate to that which the