

## CARGO HANDLING SPACE VENTILATION

**§ 153.310 Ventilation system type.**

A cargo handling space must have a permanent forced ventilation system of the exhaust type.

**§ 153.312 Ventilation system standards.**

A cargo handling space ventilation system must meet the following:

(a) A ventilation system exhaust duct must discharge no less than 10 m (approx. 32.8 ft) from openings into or ventilation intakes for, accommodation or service spaces.

(b) A ventilation system must not recycle vapors from ventilation discharges.

(c) Except for the space served by the ventilation duct, a ventilation duct must not pass through a machinery room, an accommodation space, or working spaces.

(d) A ventilation system must be operable from outside the space it ventilates.

(e) A ventilation system must be sized to change the air in the ventilated space at least 30 times per hour.

(f) A ventilation system must not allow air to stagnate in any part of a ventilated space.

(g) A ventilation system must be able to exhaust air from both above and below the deck plates of a ventilated space.

**§ 153.314 Ventilation of spaces not usually occupied.**

(a) Each tankship must have portable ventilation equipment that fits the mount required in paragraph (b)(1) of this section.

(b) Each enclosed space within the cargo area that does not have a permanent ventilation system meeting § 153.312 must have:

(1) A mount for the portable mechanical ventilation equipment required by this section; and

(2) Either permanent ventilation ductwork connected to the mount and arranged to supply air to the extremities of the space; or

(3) An attachment for temporary ductwork at the mount with enough ductwork in the ventilated space and temporary ductwork stowed aboard the

vessel to supply air to the extremities of the space.

[CGD 73-96, 42 FR 49027, Sept. 26, 1977, as amended by CGD 78-128, 47 FR 21208, May 17, 1982]

**§ 153.316 Special cargo pumproom ventilation rate.**

When Table 1 refers to this section, the cargo pumproom ventilation system must change the air in the cargo pumproom 45 times per hour and discharge no less than 4 m (approx. 13.1 ft) above the deck.

## CARGO PUMPROOMS

**§ 153.330 Access.**

(a) The access door to a cargo pumproom must open on the weatherdeck.

(b) The access way to a cargo pumproom and its valving must allow passage of a man wearing the breathing apparatus required by § 153.214(b)(1).

(c) Each ladderway in a cargo pumproom must be free from obstructions by piping, framework, or other equipment.

(d) Cargo pumproom ladders and platforms must have guard railings.

(e) Each ladder to a cargo pumproom must have an incline from the horizontal of less than 60°.

**§ 153.332 Hoisting arrangement.**

(a) A cargo pumproom located below the weatherdeck must have a permanent hoisting arrangement with a lifting capacity of 2500 N (approx. 562 lbs), operable from the weatherdeck, for the removal of an unconscious person.

(b) The cargo pumproom must have a 60 cm by 60 cm (approx. 2 ft by 2 ft) cross-sectional clearance through the hoistway.

**§ 153.333 Cargo pump discharge pressure gauge.**

Each cargo pump within a pumproom must have a discharge pressure gauge outside the pumproom.

**§ 153.334 Bilge pumping systems.**

(a) A cargo pumproom must have a bilge pumping system.

(b) The bilge pumping system must have:

(1) Complete remote operating controls outside the cargo pumproom; and

**§ 153.336**

(2) An alarm that operates when the depth of liquid in the bilges exceeds 50 cm (approx. 19.7 in.).

**§ 153.336 Special cargo pump or pump-room requirements.**

(a) When Table 1 refers to this section:

(1) The cargo pump must be an intank cargo pump;

(2) The cargo pumproom must be on or above the weatherdeck; or

(3) The cargo pumproom must have the specific approval of the Commandant (G-MSO).

(b) For a cargo pumproom described in paragraph (a)(2) or (a)(3) the tankship must:

(1) Have a low pressure breathing quality air supply system for use with the breathing apparatus in the pumproom; or

(2) Meet any requirements specified by the Commandant (G-MSO).

(c) A low pressure air supply system described in paragraph (b)(1) of this section must:

(1) Run from fixed air bottles to the pumproom;

(2) Have an air compressor to recharge the fixed air bottles;

(3) have hose connections in the pumproom suitable for use with the breathing apparatus required in §153.214(b)(1); and

(4) have the air capacity to enable two men to work in the pumproom for at least one hour each without using the cartridges for the breathing apparatus required in §153.214(b)(1).

[CGD 78-128, 47 FR 21208, May 17, 1982, as amended by CGD 82-063b, 48 FR 4781, Feb. 3, 1983]

CARGO VENTING SYSTEMS

**§ 153.350 Location of B/3 vent discharges.**

Except as prescribed in §153.353, a B/3 venting system must discharge:

(a) At the highest of the following points:

(1) 6m (approx. 19.7 ft) above the weatherdeck.

(2) B/3 above the weatherdeck.

(3) 6m (approx. 19.7 ft) above a walkway, if the walkway is within a 6m (approx. 19.7 ft) horizontal radius from the vent discharge.

**46 CFR Ch. I (10-1-08 Edition)**

(b) At least 15m (approx. 49.2 ft) from air intakes for, or openings into, accommodation and service spaces.

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

**§ 153.351 Location of 4m vent discharges.**

Except as prescribed in §153.353, a 4m venting system must discharge:

(a) At least 4m (approx. 13.1 ft) above the higher of:

(1) the weatherdeck; or

(2) any walkway that is within a 4m (approx. 13.1 ft) horizontal radius from the vent discharge.

(b) At least 10m (approx. 32.8 ft) from air intakes for, or openings into, accommodation or service spaces.

[CGD 78-128, 47 FR 21208, May 17, 1982]

**§ 153.352 B/3 and 4 m venting system outlets.**

A B/3 or 4 m venting system outlet must:

(a) Discharge vertically upwards; and

(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 (G-MSO).

[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).