#### § 153.463

cargo must not create static arcing as the inert gas is injected into the tank.

#### § 153.463 Vent system discharges.

The discharge of a venting system must be at least 10 m (approx. 32.8 ft) from an ignition source if:

- (a) The cargo tank is endorsed to carry a flammable or combustible cargo; and
- (b) Table 1 requires the cargo to have a PV venting system.

#### § 153.465 Flammable vapor detector.

- (a) A tankship that carries a flammable cargo must have two vapor detectors that meet §35.30–15(b) of this chapter.
- (b) At least one of the vapor detectors in paragraph (a) of this section must be portable.

#### §153.466 Electrical equipment.

A tankship carrying a flammable or combustible cargo under this part must meet subchapter J of this chapter.

DESIGN AND EQUIPMENT FOR POLLUTION CONTROL

SOURCE: Sections 153.470 through 153.491 appear at CGD 81–101, 52 FR 7781, Mar. 12, 1987, unless otherwise noted.

### § 153.470 System for discharge of NLS residue to the sea: Categories A, B, C, and D.

Unless waived under §153.491, each ship that discharges Category A, B, or C NLS residue, or Category D NLS residue not diluted to ½0th of its original concentration, into the sea under \$\\$\sigma\_1126\$ and 153.1128 must have an NLS residue discharge system meeting the following:

(a) Minimum diameter of an NLS residue discharge outlet. The outlet of each NLS residue discharge system must have a diameter at least as great as that given by the following formula:

$$D = \frac{(Q_d)(cosine \phi)}{5L}$$

where:

D=Minimum diameter of the discharge outlet in meters.

 $Q_d$ =Maximum rate in cubic meters per hour at which the ship operator wishes to dis-

charge slops (note: Q<sub>d</sub> affects the discharge rate allowed under §153.1126(b)(2)).

L=Distance from the forward perpendicular to the discharge outlet in meters.

φ=The acute angle between a perpendicular to the shell plating at the discharge location and the direction of the average velocity of the discharged liquid.

- (b) Location of an NLS residue discharge outlet. Each NLS residue discharge outlet must be located—
- (1) At the turn of the bilge beneath the cargo area; and
- (2) Where the discharge from the outlet is not drawn into the ship's seawater intakes.
- (c) Location of dual NLS residue discharge outlets. If the value of 6.45 for K is used in §153.1126(b)(2), the NLS residue discharge system must have two outlets located on opposite sides of the ship.

[CGD 81-101, 52 FR 7781, Mar. 12, 1987, as amended by CGD 81-101, 53 FR 28974, Aug. 1, 1988 and 54 FR 12629, Mar. 28, 1989; CGD 95-028, 62 FR 51209, Sept. 30, 1997]

## §153.480 Stripping quantity for Category B and C NLS tanks on ships built after June 30, 1986: Categories B and C.

Unless waived under §153.491, Category B and C NLS cargo tanks on each ship built after June 30, 1986 must have stripping quantities determined under §153.1604 that are less than—

- (a)  $0.15 \text{ m}^3$  if Category B; and
- (b)  $0.35 \text{ m}^3$  if Category C.

# § 153.481 Stripping quantities and interim standards for Category B NLS tanks on ships built before July 1, 1986: Category B.

Unless waived under §153.483 or §153.491, each Category B NLS cargo tank on ships built before July 1, 1986 must meet the following:

- (a) Unless the tank meets the interim standard provided by paragraph (b) of this section and is prewashed in accordance with §153.1118, the tank must have a stripping quantity determined under §153.1604 that is less than 0.35m<sup>3</sup>.
- (b) Before October 3, 1994, the tank may have a total NLS residue determined under §153.1608 that is less than 1.0 m³ or ½5000th of the tank's capacity and an NLS residue discharge system meeting the following: