

or terminal to have adequate reception facilities for the NLS residue.

NOTE TO §153.483: Certificates of Inspection and any IMO Certificates issued to ships on restricted voyage waivers indicate that while the ship carries an NLS cargo or NLS residue, it is limited to voyages between the ports or terminals listed on the certificate.

[CGD 81-101, 52 FR 7781, Mar. 12, 1987, as amended by CGD 81-101, 53 FR 28975, Aug. 1, 1988 and 54 FR 12629, Mar. 28, 1989]

**§ 153.484 Prewash equipment.**

Unless the ship operator shows that the prewash equipment specified in this section will be available at discharge or prewash facilities or the equipment is waived under §153.491, to have its Certificate of Inspection or Certificate of Compliance endorsed to carry a Category A NLS or a Category B or C NLS requiring viscosity or melting point information under §153.908 (a) and (b), a ship must have the following:

(a) For the tanks that carry the NLS, a tank washing system capable of washing all interior tank surfaces except those shielded from the washing system spray by ship's structure, and consisting of a wash water supply system and—

(1) A fixed tank washing machine in each tank; or

(2) A portable tank washing machine and, if required by the Coast Guard, equipment to move it during washing and when storing.

(b) Piping, valving, and crossovers needed to arrange the cargo piping so that the wash water passes through the cargo pump and cargo piping during tank washing or discharge of tank wash water.

(c) If the approved Procedures and Arrangements Manual specifies the hot water prewash required under 153.1108, a means of supplying water to the tank washing machine under paragraph (a) of this section at—

(1) A temperature of at least 60 °C (140 °F) when it leaves the washing machine; and

(2) The flow rate needed for the washing machine jets to meet paragraph (a) of this section.

**§ 153.486 Design and equipment for removing NLS residue by ventilation: Categories A, B, C, and D.**

(a) If NLS residue is to be removed from a cargo tank by ventilation, in addition to the equipment required under paragraph (b) of this section the ship must have—

(1) Openings in the tank deck near the sump or suction point;

(2) If the openings required by paragraph (a)(1) of this section are insufficient, an access opening for visually determining whether liquid remains in the sump area of the cargo tank after ventilation or some other means for making this determination; and

(3) An approved Procedures and Arrangements Manual with instructions that meet §153.490(b)(3).

(b) Unless the ship operator shows that the ventilation equipment specified in this paragraph will be available from shore when needed, if NLS residue is to be removed from a cargo tank by ventilation, in addition to the equipment required under paragraph (a) of this section the ship must have—

(1) Portable forced air ventilating equipment fitting the ventilation openings required in paragraph (a) of this section and able to ventilate the extremities of the tank to the extent prescribed in Appendix C of the IMO *Standards for Procedures and Arrangements for the Discharge of Noxious Liquid Substances*, Resolution MEPC 18(22), 1985; and

(2) A connector that allows a fan or air supply to be connected to the hose connections for the tank at the manifold.

NOTE: The Clean Air Act (42 U.S.C. 7401 *et seq.*) allows states to regulate emissions from tank ventilation. There may be other regulations, both local and Federal, that affect the use of tank ventilation for safety or environmental purposes.

**§ 153.488 Design and equipment for tanks carrying high melting point NLSs: Category B.**

Unless waived under §153.491, for a ship to have its Certificate of Inspection or Certificate of Compliance endorsed allowing a tank to carry a Category B NLS with a melting point of 15 °C or more, the cargo tank must have—