

§ 153.1122

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(2) The equipment specified in §153.484 must be used as prescribed in the approved Procedures and Arrangements Manual for the prewash.

(3) The wash water must be heated if required by §153.1108, and water or tank washings must pass through the cargo pump and piping, including any stripping equipment, during washing or during discharge of tank washings.

(4) Except as required in paragraph (b)(5) of this section, the number of washing machine cycles specified in Table 153.1120 must be completed. If a prewash is required by a section listed under Column 1 of Table 153.1120 and another section listed under Column 2, the number of cycles in Column 1 must be completed but no additional cycles are necessary.

(5) If the approved Procedures and Arrangements Manual specifies that a tank washing machine must be moved for the prewash of a tank from which a Category A NLS or a solidifying NLS

has been unloaded, the number of washing machine cycles specified in Table 153.1120 must be completed at each position to which the washing machine is moved.

(6) When the NLS is immiscible with water or is a solidifying cargo, the tank must be pumped out each time enough tank washings collect in the bottom of the tank for the pump to gain suction, or the procedures in paragraphs (b)(3), (b)(4), and (b)(5) of this section must be repeated two additional times with the tank pumped out each time, for a total of three washings.

(7) Items 12 through 14 in the Cargo Record Book must be completed and, if the prewash is for a Category A NLS, verification that the procedures specified in the approved Procedures and Arrangements Manual were followed shown by the Surveyor's endorsement in the Cargo Record Book.

TABLE 153.1120—NUMBER OF WASHING MACHINE CYCLES IN THE PREWASH PROCEDURE

	Number of washing machine cycles	
	Column 1: Prewash under § 153.1116 or for a solidifying NLS under § 153.1108	Column 2: Prewashes except those listed under column 1
Category A NLS .....	2	1
Category B or C NLS .....	1	1/2

[CGD 81–101, 52 FR 7785, Mar. 12, 1987, as amended by CGD 81–101, 53 FR 28975, Aug. 1, 1988 and 54 FR 12629, Mar. 28, 1989]

**§ 153.1122 Discharges of NLS residue from tank washing other than a prewash: Categories A, B, and C.**

Tank washings that do not result from a prewash and that contain Category A, B, or C NLS residues must be discharged to a reception facility or discharged to the sea under §153.1126 or §153.1128 except those tank washings resulting from washing a tank that has been cleaned following a ventilation procedure in the approved Procedures and Arrangements Manual.

**§ 153.1124 Discharges of Category D NLS residue.**

NLS residue from Category D NLSs must be discharged to a reception facil-

ity or discharged to the sea using the following procedure:

(a) Before discharge begins, drain or flush the NLS residue in the tank's piping systems into the tank.

(b) After draining or flushing, discharge the NLS residue to the sea in accordance with §153.1128 or transfer it to a slop tank and discharge in accordance with §153.1126.

**§ 153.1126 Discharge of NLS residue from a slop tank to the sea: Categories A, B, C, and D.**

NLS residue in a slop tank may not be discharged into the sea unless—

(a) The ship meets the conditions for discharging the NLS residue from a cargo tank in §153.1128; and

(b) For Category B NLS residue transferred to the slop tank under §153.1119(b), the NLS is discharged—

(1) Through an NLS residue discharge system with the flow recording equipment required in §153.481(b)(2) operating; and

(2) At a rate maintained at or below Q in the following:

For tank contents that are miscible

$$Q = \frac{VKU^{1.4}L^{1.6}}{N} \times 10^{-5} \text{ m}^3/\text{hr}$$

For tank contents that are immiscible

$$Q = KU^{1.4} L^{1.6} \times 10^{-5} \text{ m}^3/\text{hr}$$

where:

Q=maximum permissible slops discharge rate in cubic meters per hour.

V=volume of slops in the tank in cubic meters.

K=4.3, except K=6.45 if Q is distributed between two NLS residue discharge outlets on opposite sides of the ship (see §§153.470(c) and 153.481(b)).

U=ship's speed in knots.

L=ship's length in meters.

N=number of tanks containing Category B NLS residue pumped into the slop tank.

**§153.1128 Discharge of NLS residue from a cargo tank to the sea: Categories A, B, C, and D.**

The discharge of NLS residue to the sea must be made with the ship at least 22.24 km (12 nautical miles) from the nearest land, and must meet the following additional conditions:

(a) To discharge the following the ship must be in water at least 25 m (76.2 ft) deep:

(1) Category B or C NLS residue diluted to less than 1 ppm of the NLS.

(2) Category B or C NLS residue resulting from washing a tank after the following washing procedure has been completed:

(i) If the tank is not required to be prewashed under this part, the tank must be washed following the procedures that apply to a prewash of a Category B NLS in §153.1120 using one washing machine cycle, and the tank washings discharged to a reception facility or to the sea under §153.1126 or paragraph (a)(1), (c) or (d) of this section.

(ii) After the tank has been prewashed or has been washed under paragraph (a)(2)(i) of this section, the tank must then be washed with one cycle of the tank washing machine, and

the tank washings discharged to a reception facility or to the sea in accordance with §153.1126 or paragraph (a)(1), (c), or (d) of this section.

(b) To discharge a Category D NLS residue to which 10 times its volume in water is added and mixed, the ship must be—

(1) If self-propelled, maintained at a speed of at least 12.97 km/hr (7 knots); and

(2) If not self-propelled, maintained at a speed of at least 7.41 km/hr (4 knots).

(c) Each ship built before July 1, 1986 that discharges Category A, B or C NLS residues before January 1, 1988 must be—

(1) In water at least 25 m (76.2 ft) deep;

(2) If discharging the residue of a Category A NLS cargo, discharging only residue created by washing the Category A NLS's cargo tank after a prewash;

(3) If discharging the residue of a Category B NLS cargo, discharging no more than the larger of 1 m<sup>3</sup> or 1/3000th the volume of the Category B cargo loaded;

(4) If discharging the residue of a Category C NLS cargo, discharging no more than the larger of 3 m<sup>3</sup> or 1/1000th the volume of the Category C cargo loaded;

(5) If self-propelled, maintained at a speed of at least 12.97 km/hr (7 knots); and

(6) If not self-propelled, maintained at a speed of at least 7.41 km/hr (4 knots).

(d) To discharge Category A, B, C, or D NLS residue other than as allowed under paragraphs (a) through (c) of this section, the ship must be—

(1) In water at least 25 m (76.2 ft) deep;

(2) Discharging at a rate not exceeding that used for Q<sub>d</sub> in §153.470;

(3) If self-propelled, maintained at speed no less than the minimum specified in the approved Procedures and Arrangements Manual but at least 12.97 km/hr (7 knots);

(4) If not self-propelled, maintained at a speed no less than the minimum specified in the approved Procedures and Arrangements Manual but at least 7.41 km/hr (4 knots);