

§ 157.155

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Coast Guard under §157.112 or by the government of the vessel's flag state.

[CGD 77-058b, 45 FR 43709, June 30, 1980, as amended by CGD 82-28, 50 FR 11628, Mar. 22, 1985]

COW OPERATIONS

§ 157.155 COW operations: General.

(a) The master of a tank vessel having a COW system under §157.10(e), §157.10a(a)(2), or 157.10c(b)(2) shall ensure that—

(1) Before crude oil washing a cargo tank, the level in each tank with crude oil that is used as a source for crude oil washing is lowered at least one meter;

(2) A tank used as a slop tank is not used as a source for crude oil washing until:

(i) Its contents are discharged ashore or to another tank; and

(ii) The tank contains only crude oil;

(3) During COW operations:

(i) The valves under §157.122(i)(1) are shut; or

(ii) The blanks under §157.122(i)(2) are installed;

(4) The rotation of each COW machine mounted to or close to the bottom of each cargo tank is verified by:

(i) A visual inspection of a means located outside of the cargo tank that indicates movement of the machine during COW operations;

(ii) An audio inspection during COW operations; or

(iii) An inspection on a ballast voyage, with water as the fluid flowing through the machine;

(5) During the audio inspection under paragraph (a)(4)(ii) of this section, the COW machine being inspected is the only one operating in that tank;

(6) Before the inspection under paragraph (a)(4)(iii) of this section, the tank that has the COW machine being inspected in it, is gas freed;

(7) Each COW machine that is inspected under paragraph (a)(4)(iii) of this section is inspected at least once after every sixth COW operation of that machine, but no less than once every 12 months;

(8) After each stripping operation is completed, each tank:

(i) Is sounded by a means under §157.128(b); and

(ii) Contains no oil except a minimal quantity near the stripping suction;

(9) Before the tank vessel begins each ballast voyage, each cargo tank and each cargo main, stripping, and COW piping is stripped of crude oil and the strippings are conveyed ashore through the piping under §§157.11(d)(3) or 157.11(e)(4);

(10) Before water washing the cargo tanks, the piping of the COW system is drained of crude oil;

(11) When the cargo tanks are not being water washed, the hydrant valves under §157.122(g) are blanked off;

(12) If COW machines that are used as anchors for the piping of the COW system are removed, the means available under §157.122(1) for anchoring the piping are installed;

(13) The fire main is not connected to the COW system; and

(14) On combination carriers, if flexible hoses under §157.122(o) are used, those hoses are protectively stowed when not installed in the COW piping system.

(b) In addition to meeting paragraph (a) of this section, the master of a tank vessel having a COW system under §157.10a(a)(2) or §157.10c(b)(2) shall ensure that—

(1) Before ballasting cargo tanks upon leaving a port, each cargo pump, manifold, and piping that is used for ballasting the cargo tanks is drained of all crude oil; and

(2) Before ballasting or deballasting cargo tanks, except when ballasting cargo tanks to leave a port, the cargo piping that is used for ballasting or deballasting the cargo tanks is water washed.

[CGD 77-058b, 45 FR 43709, June 30, 1980, as amended by CGD 82-28, 50 FR 11628, Mar. 22, 1985]

§ 157.156 COW operations: Meeting manual requirements.

Except as allowed in §157.158, the master of a foreign tank vessel having a COW system under §§157.10(e), 157.10a(a)(2), or 157.10c(b)(2) that has the *Crude Oil Washing Operations and Equipment Manual* approved under §157.112 and is operating in the navigable waters of the United States or transferring cargo at a port or place subject to the jurisdiction of the

United States and the master of a U.S. tank vessel having a COW system under §157.10(e), §157.10a(a)(2), or §157.10c(b)(2) shall ensure that during each COW operation—

(a) The procedures listed in the *Crude Oil Washing Operations and Equipment Manual* are followed; and

(b) The characteristics recorded in the *Crude Oil Washing Operations and Equipment Manual* under §157.150(b) are met.

[CGD 77-058b, 45 FR 43709, June 30, 1980, as amended by CGD 82-28, 50 FR 11628, Mar. 22, 1985]

§157.158 COW operations: Changed characteristics.

The COW system may be operated with characteristics that do not meet those recorded under §157.150(b) only if:

(a) The tank vessel passes the inspections under §157.140 using the changed characteristics;

(b) The changed characteristics used to pass the inspections under §157.140 are recorded in the *Crude Oil Washing Operations and Equipment Manual* approved under §157.112; and

(c) The Coast Guard issues to the tank vessel an amending letter stating that the tank vessel complies with this subpart with these characteristics.

§157.160 Tanks: Ballasting and crude oil washing.

(a) The owner, operator, and master of a tank vessel under §157.10(e) shall ensure that:

(1) Ballast water is carried in a cargo tank only as allowed under §157.35;

(2) For oil cargo residue control, at least 25 percent of the cargo tanks are crude oil washed before each ballast voyage and that each cargo tank is crude oil washed at least once every fourth time crude oil is discharged from the tank, but no tank need be crude oil washed more than once during each 120 day period;

(3) Ballast water in a cargo tank that is crude oil washed but not water rinsed during or after the most recent discharge of crude oil from that tank is discharged in accordance with §157.37(a); and

(4) Cargo tanks are not crude oil washed during a ballast voyage.

(b) The owner, operator, and master of a tank vessel having a COW system under §157.10a(a)(2) or §157.10c(b)(2) shall ensure that—

(1) Ballast water is carried only in a cargo tank that is crude oil washed during or after the most recent discharge of crude oil from that tank;

(2) Before each ballast voyage a sufficient number of cargo tanks have been crude oil washed during or after the most recent discharge of crude oil from those tanks to allow ballast water to be carried in cargo tanks:

(i) With a total capacity to meet the draft and trim requirements in §157.10a(d); and

(ii) For the vessel's trading pattern and expected weather conditions;

(3) For oil cargo residue control, at least 25 percent of the cargo tanks not used for carrying ballast water under paragraph (b)(2)(i) of this section are crude oil washed before each ballast voyage, and that each cargo tank is crude oil washed at least once every fourth time crude oil is discharged from the tank, but no tank need be crude oil washed more than once during each 120 day period;

(4) Cargo tanks are not crude oil washed during a ballast voyage; and

(5) Ballast water in a cargo tank that is crude oil washed but not water rinsed during or after the most recent discharge of crude oil from that tank is discharged in accordance with §157.37(a).

[CGD 77-058b, 45 FR 43709, June 30, 1980, as amended by CGD 82-28, 50 FR 11628, Mar. 22, 1985; USCG-2000-7641, 66 FR 55573, Nov. 2, 2001]

§157.162 Crude oil washing during a voyage.

The master of a tank vessel having a COW system under §157.10(e), §157.10a(a)(2), or §157.10c(b)(2) shall ensure that each cargo tank that is crude oil washed during a voyage other than a ballast voyage—

(a) Remains empty so that the tank may be inspected upon arrival at the next discharge port; and

(b) If it is to be used as a ballast tank when leaving the discharge port, is ballasted before the vessel departs from that discharge port so that the