(21) The procedures for ballasting and deballasting cargo tanks.
(22) The step by step procedure for the inspection of the COW system by vessel personnel before COW operations begin that includes the procedure for inspecting and calibrating each instrument, (Operational Checklist).
(23) The intervals for on board inspection and maintenance of the COW equipment. Informational references to technical manuals supplied by the manufacturers may be included in this part of the manual.
(24) A list of crude oils that are not to be used in COW operations.
(b) In addition to meeting paragraph (a) of this section, each Crude Oil Washing Operations and Equipment Manual on a tank vessel having a COW system under § 157.10(e), § 157.10(a)(2), or § 157.10(c)(b)(2) must include the following:
(1) The procedure to meet § 157.166.
(2) The procedures to meet § 157.155(b).

§ 157.140 Tank vessel inspections.
(a) Before issuing a letter under § 157.142, the Coast Guard makes an initial inspection of each U.S. tank vessel having a COW system under § 157.10(e), § 157.10(a)(2), or § 157.10(c)(b)(2) and each foreign tank vessel whose owner or operator submitted the plans under § 157.102 to determine whether or not, when entering a port, the cargo tanks that carry crude oil meet the following:
(1) After each tank is crude oil washed but not water rinsed, except the bottom of the tank may be flushed with water and stripped, each tank is essentially free of oil residues to a degree acceptable to the Coast Guard inspector.
(2) After the tanks that are to be used as ballast tanks when leaving the port are crude oil washed and stripped but not water rinsed or bottom flushed, they are filled with water and the total volume of crude oil floating on top of the water in these tanks is 0.085 percent or less of the total volume of these tanks.
(b) Except on a tank vessel under § 157.10(e), if the initial inspection under paragraph (a) of this section has been passed and the vessel arrives at the first cargo loading port after completing a ballast voyage, the Coast Guard monitors the discharge of effluent from those tanks that have been crude oil washed, water rinsed, stripped, and filled with ballast water to determine whether or not the oil content of the effluent is 15 ppm or less.

§ 157.142 Letter of acceptance: Inspections.
If the inspections under § 157.140 are passed, the Coast Guard issues to the tank vessel a letter that states that the vessel complies with this subpart.

§ 157.144 Tank vessels of the same class: Inspections.
(a) If more than one tank vessel is constructed from the same plans, the owner or operator may submit a written request to the Commandant (CG–543), U.S. Coast Guard, 2100 2nd St. SW., Stop 7581, Washington, DC 20593–7581, for only one of those tank vessels to be inspected under § 157.140.
(b) Only one tank vessel of the class is inspected under § 157.140, if the Commandant accepts the request submitted under paragraph (a) of this section.

§ 157.146 Similar tank design: Inspections on U.S. tank vessels.
(a) If a U.S. tank vessel has tanks similar in dimensions and internal structure, the owner or operator may submit a written request to the Officer in Charge, Marine Inspection, of the zone in which the COW system is inspected, for only one of those tanks to be inspected under § 157.140(a)(1).
§ 157.147 Similar tank design: Inspections on foreign tank vessels.

(a) If a foreign tank vessel has tanks similar in dimensions and internal structure, the owner or operator may submit a written request to the Commandant (CG–543), U.S. Coast Guard, 2100 2nd St. SW., Stop 7581, Washington, DC 20593–7581, for only one of those tanks to be inspected under §157.140(a)(1).

(b) Only one tank of a group of tanks similar in dimensions and internal structure is inspected under §157.140(a)(1), if the Commandant accepts the request submitted under paragraph (a) of this section.


(a) Before the inspections under §157.140 are conducted by the Coast Guard, the owner or operator of a foreign tank vessel that is to be inspected must submit to the Coast Guard inspector evidence that the COW system has been installed in accordance with the plans accepted under §157.106.

(b) Before the inspections under §157.140 are conducted by the Coast Guard, the owner or operator of a tank vessel that is to be inspected must submit to the Coast Guard inspector evidence that the COW piping system has passed a test of 1½ times the design working pressure.


After passing the inspections under §157.140, the owner, operator, and master shall ensure that the following are recorded in the Crude Oil Washing Operations and Equipment Manual approved under §157.112:

(a) The results of the inspections under §157.140.

(b) The following characteristics used to pass the inspections under §157.140:

(1) Pressure and flow of the crude oil pumped to the COW machines.

(2) Revolutions, number of cycles, and length of cycles of each COW machine.

(3) Pressure and flow of the stripping suction device.

(4) Number and location of COW machines operating simultaneously in each cargo tank.

(5) Volume of water used for water rinsing.

(6) Trim conditions of the tank vessel.

PERSONNEL

§ 157.152 Person in charge of COW operations.

The owner, operator, and master of a tank vessel having a COW system under §157.10(e), §157.10(a)(2), or §157.10c(b)(2) shall ensure that the person designated as the person in charge of COW operations—

(a) Knows the contents in the Crude Oil Washing Operations and Equipment Manual approved by the Coast Guard under §157.112 or by the government of the vessel’s flag state;

(b) On at least two occasions, has participated in crude oil washing of cargo tanks, one of those occasions occurring on:

(1) The tank vessel on which the person assumes duties as the person in charge of COW operations; or

(2) A tank vessel that is similar in tank design and which has COW equipment similar to that used on the tank vessel on which the person assumes duties as the person in charge of COW operations; and

(c) Has one year or more of tank vessel duty that includes oil cargo discharge operations and:

(1) Crude oil washing of cargo tanks; or

(2) Has completed a training program in crude oil washing operations that is approved by the Coast Guard or the government of the vessel’s flag state.