

(c) All cargo vapor is returned to shore through the valved connection on the venting system if:

(1) The cargo requires closed gauging, is referenced to §153.372 or is referenced to §153.525;

(2) The transfer terminal has vapor return equipment; and

(3) In his estimation the vapor return equipment is adequate to handle the vapor expected from the tank.

§ 153.972 Connecting a cargo hose.

The person in charge of cargo transfer may not authorize the connection of a hose to a cargo containment system unless:

(a) He has ensured himself that the cargo will not weaken or damage the hose;

(b) The hose is marked as meeting the standards of §153.940;

(c) The date of the hose's last pressure test is within one year of the date on which the hose is used to transfer cargo;

(d) The recommended working pressure marked on a hose used for discharge meets or exceeds the working pressure marked on the cargo piping at the hose connection; and

(e) The cargo's temperature is within the manufacturer's recommended maximum and minimum hose temperatures.

§ 153.975 Preparation for cargo transfer.

The person in charge of cargo transfer may not approve or continue cargo transfer unless the following conditions are met:

(a) No fires or open flames are on deck or in compartments near the hose connections when Table 1 requires the cargo's containment system to have a fire protection system.

(b) Any electrical bonding of the tankship to the transfer facility is made before the cargo transfer piping is joined.

(c) Any supplemental inert gas supply necessary to maintain the 3.5 kPa gauge (approx. 0.5 psig) pressure in the tank during offloading (see §153.500) is connected to the inert gas pressure control system.

(d) The transfer connections have enough slack to allow for vessel movement.

(e) The transfer connections are supported by tackles.

(f) The cargo high level alarms, tank overflow alarms and overflow control systems are functioning correctly when the cargo is loaded.

(g) Joints and couplings are gasketed and mated tightly.

(h) Flanges are bolted tightly.

(i) No repair work is underway in areas where cargo or cargo vapors may collect.

(j) Cargo and sea valves are properly set, with those sea valves connected to cargo piping lashed or sealed shut.

(k) Venting system bypass valves are set for cargo transfer and are operating properly.

(l) All scuppers are plugged.

(m) Smoking is limited to safe places.

(n) Fire fighting and safety equipment is ready.

(o) He is in effective communication with the transfer terminal.

(p) The person in charge of the transfer terminal has acknowledged that he is ready to transfer.

(q) Pressures within the cargo transfer and containment systems do not exceed the pressure ranges for which the transfer hose and containment systems are designed.

(r) No vessels that would hazard cargo transfer are alongside the tankship.

[CGD 73-96, 42 FR 49027, Sept. 26, 1977, as amended by CGD 78-128, 47 FR 21211, May 17, 1982]

§ 153.976 Transfer of packaged cargo or ship's stores.

The person in charge of cargo transfer may neither begin nor continue the transfer of a flammable or combustible cargo while packaged cargo or ship's stores are transferred unless transfer of the packaged cargo or ship's stores does not hazard transfer of the flammable or combustible cargo.

§ 153.977 Supervision of cargo transfer.

The person in charge of cargo transfer shall:

§ 153.979

- (a) Supervise the operation of cargo system valves;
- (b) Monitor the cargo loading rate to ensure it does not exceed that stated on the cargo piping plan; and
- (c) Monitor the cargo level in the tanks to make sure they do not overflow.

[CGD 78-128, 47 FR 21211, May 17, 1982]

§ 153.979 Gauging with a sounding tube.

- (a) No person may remove the cover of a sounding tube unless he has authorization from the person in charge of cargo transfer.
- (b) The person in charge of cargo transfer may not authorize removal of the cover from a sounding tube gauge unless all tank pressure has been relieved through the tank's venting system.

§ 153.980 Isolation of automatic closing valves.

The person in charge of cargo transfer may isolate automatic closing valves described in §153.408(b) from a cargo containment system if the following conditions are met:

- (a) The containment system carries products to which §153.408 does not apply.
- (b) The valves are isolated by:
 - (1) Removing the valves; or
 - (2) Installing removable pipes and blind flanges to by-pass the valves.

[CGD 78-128, 47 FR 21211, May 17, 1982]

§ 153.981 Leaving room in tank for cargo expansion.

The person in charge of cargo transfer shall ensure that the amount of cargo in a tank does not exceed the tank's capacity at any ambient temperature between -18 °C (approx. 0 °F) and 46 °C (approx. 115 °F).

§ 153.983 Termination procedures.

Upon completion of the transfer operation, the person in charge of cargo transfer shall ensure that:

- (a) The cargo transfer connections are closed off;
- (b) The transfer lines and hoses are drained of cargo, either into the tank or back to the transfer terminal;

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- (c) Any electrical bonding between the vessel and the shore facility is broken only after the cargo hose is disconnected and all spills removed; and
- (d) Each vent system is returned to its nonloading configuration.

SPECIAL CARGO PROCEDURES

§ 153.1000 Special operating requirements for cargoes reactive with water.

When Table 1 refers to this section, the master must ensure that the cargo:

- (a) Is carried only in a containment system completely isolated from any systems containing water, such as slop tanks, ballast tanks, cargo tanks containing slops or ballast, their vent lines or piping; and
- (b) Is separated by double walls, such as cofferdams and piping tunnels, from any system containing water, as for example those described in paragraph (a) of this section.

§ 153.1002 Special operating requirements for heat sensitive cargoes.

When Table 1 refers to this section, the master shall make sure that:

- (a) The cargo temperature is maintained below the temperature that would induce polymerization, decomposition, thermal instability, evolution of gas or reaction of the cargo;
- (b) Any heating coils in the cargo tank are blanked off; and
- (c) The cargo is not carried in uninsulated deck tanks.

[CGD 78-128, 47 FR 21211, May 17, 1982]

§ 153.1003 Prohibited carriage in deck tanks.

When Table 1 refers to this section, cargoes may not be carried in deck tanks.

[CGD 95-900, 60 FR 34050, June 29, 1995]

§ 153.1004 Inhibited and stabilized cargoes.

- (a) Before loading a cargo containment system with a cargo referenced to this section in Table 1, the person in charge of cargo transfer shall make sure that the cargo containment system is free of contaminants that could:
 - (1) Catalyze the polymerization or decomposition of the cargo; or