

cargo tank to the devices. The valve for the connection point must be labeled "Pressure Sensor/indicator Connection."

(c) For stripping operations with closed cargo tanks, the maximum stripping rate must not exceed the volumetric flow capacity of the vacuum relief valve protecting the cargo tank.

**§ 39.6005 Inspection prior to conducting gas-freeing operations—B/ALL.**

(a) The following inspections must be conducted by the barge person in charge prior to commencing gas-freeing operations, and show that—

(1) Each part of the barge's vapor collection system is aligned to allow vapor to flow to a cleaning facility's vapor control system (VCS);

(2) If a fluid displacement system is used to conduct gas-freeing operations—

(i) The fluid supply line is connected to the fluid injection connection; and

(ii) The maximum fluid injection rate is determined in accordance with 46 CFR 39.6007(c)(2);

(3) The maximum stripping or gas-freeing rate is determined in accordance with 46 CFR 39.6003(c) or 39.6007(c), respectively, and adequate openings required by 46 CFR 39.6007(c)(1) are available and identified;

(4) The pressure-sensing and pressure-indicating devices required by 33 CFR 154.2203 are connected as required by 46 CFR 39.6003(b);

(5) The maximum and minimum operating pressures of the barge being cleaned are determined;

(6) Unrepaired loose covers, kinks, bulges, gouges, cuts, slashes, soft spots, or any other defects which would permit the discharge of vapors through the vapor recovery hose material must be detected during inspection and repaired prior to operation;

(7) The facility vapor connection is electrically insulated from the barge vapor connection and the fluid injection connection is electrically insulated from the fluid injection source, if fitted, in accordance with OCIMF ISGOTT section 17.5 (incorporated by reference, see 46 CFR 39.1005); and

(8) All equipment is bonded in accordance with 46 CFR 39.6001(h).

**§ 39.6007 Operational requirements for tank barge cleaning—B/ALL.**

(a) During cleaning operations, vapors from a tank barge cannot be transferred to a cleaning facility which does not have a marine vapor control system (VCS) certified by a certifying entity, and its facility operations manual endorsed by the Captain of the Port (COTP) as meeting the requirements of 33 CFR part 154, subpart P.

(b) Prior to commencing stripping operations, the maximum allowable stripping rate must be determined. The maximum allowable stripping rate must not exceed the volumetric flow capacity of the vacuum relief valve protecting the cargo tank.

(c) The maximum gas-freeing rate is determined by the following:

(1) For a vacuum displacement system—

(i) The maximum allowable gas-freeing rate is a function of the area open to the atmosphere for the cargo tank being gas-freed. The area open to the atmosphere must be large enough to maintain the pressure in the cargo tank being gas-freed at or above 14.5 pounds per square inch absolute (psia) (−0.2 pounds per square inch gauge (psig));

(ii) The maximum allowable gas-freeing rate must be calculated from Table 1 of this section, using the area open to the atmosphere for the cargo tank being gas-freed as the entering determination;

(2) For a fluid displacement system, the maximum allowable gas-freeing rate is determined by the lesser of the following:

(i) Eighty percent of the total venting capacity of the pressure relief valve in the cargo tank venting system when relieving at its set pressure;

(ii) Eighty percent of the total vacuum relieving capacity of the vacuum relief valve in the cargo tank venting system when relieving at its set pressure; or

(iii) The rate based on pressure drop calculations at which, for a given pressure at the facility vapor connection, the pressure in the cargo tank being gas-freed exceeds 80 percent of the setting of any pressure relief valve in the cargo tank venting system.