Coast Guard, DHS

§ 154.500 Hose assemblies.

Each hose assembly used for transferring oil or hazardous material must meet the following requirements:

(a) The minimum design burst pressure for each hose assembly must be at least four times the sum of the pressure of the relief valve setting (or four times the maximum pump pressure when no relief valve is installed) plus the static head pressure of the transfer system, at the point where the hose is installed.

(b) The maximum allowable working pressure (MAWP) for each hose assembly must be more than the sum of the pressure of the relief valve setting (or the maximum pump pressure when no relief valve is installed) plus the static head pressure of the transfer system, at the point where the hose is installed.

(c) Each nonmetallic hose must be usable for oil or hazardous material service.

(d) Each hose assembly must either have—

(1) Full threaded connections;

(2) Flanges that meet ANSI B16.5 or ANSI B16.24 (both incorporated by reference, see 33 CFR 154.106); or

(3) Quick-disconnect couplings that meet ASTM F1122 (incorporated by reference, see 33 CFR 154.106).

(e) Each hose must be marked with one of the following:

(1) The name of each product for which the hose may be used; or

(2) For oil products, the words “OIL SERVICE”;

(3) For hazardous materials, the words “HAZMAT SERVICE—SEE LIST” followed immediately by a letter, number or other symbol that corresponds to a list or chart contained in the facility’s operations manual or the vessel’s transfer procedure documents which identifies the products that may be transferred through a hose bearing that symbol.

(f) Each hose also must be marked with the following, except that the information required by paragraphs (f)(2) and (3) of this section need not be marked on the hose if it is recorded in the hose records of the vessel or facility, and the hose is marked to identify it with that information:

(1) Maximum allowable working pressure;

(2) Date of manufacture; and

(3) Date of the latest test required by 33 CFR 156.170.

(g) The hose burst pressure and the pressure used for the test required by

Subpart C—Equipment Requirements

§ 154.500 Hose assemblies.

Each hose assembly used for transferring oil or hazardous material must meet the following requirements:

(a) The minimum design burst pressure for each hose assembly must be at least four times the sum of the pressure of the relief valve setting (or four times the maximum pump pressure when no relief valve is installed) plus the static head pressure of the transfer system, at the point where the hose is installed.

(b) The maximum allowable working pressure (MAWP) for each hose assembly must be more than the sum of the pressure of the relief valve setting (or the maximum pump pressure when no relief valve is installed) plus the static head pressure of the transfer system, at the point where the hose is installed.

(c) Each nonmetallic hose must be usable for oil or hazardous material service.

(d) Each hose assembly must either have—

(1) Full threaded connections;

(2) Flanges that meet ANSI B16.5 or ANSI B16.24 (both incorporated by reference, see 33 CFR 154.106); or

(3) Quick-disconnect couplings that meet ASTM F1122 (incorporated by reference, see 33 CFR 154.106).

(e) Each hose must be marked with one of the following:

(1) The name of each product for which the hose may be used; or

(2) For oil products, the words “OIL SERVICE”;

(3) For hazardous materials, the words “HAZMAT SERVICE—SEE LIST” followed immediately by a letter, number or other symbol that corresponds to a list or chart contained in the facility’s operations manual or the vessel’s transfer procedure documents which identifies the products that may be transferred through a hose bearing that symbol.

(f) Each hose also must be marked with the following, except that the information required by paragraphs (f)(2) and (3) of this section need not be marked on the hose if it is recorded in the hose records of the vessel or facility, and the hose is marked to identify it with that information:

(1) Maximum allowable working pressure;

(2) Date of manufacture; and

(3) Date of the latest test required by 33 CFR 156.170.

(g) The hose burst pressure and the pressure used for the test required by
§ 154.510 Loading arms.

(a) Each mechanical loading arm used for transferring oil or hazardous material and placed into service after June 30, 1973, must meet the design, fabrication, material, inspection, and testing requirements in ANSI B31.3 (incorporated by reference; see §154.106).

(b) The manufacturer’s certification that the standard in paragraph (a) of this section has been met must be permanently marked on the loading arm or recorded elsewhere at the facility with the loading arm marked to identify it with that information.

(c) Each mechanical loading arm used for transferring oil or hazardous material must have a means of being drained or closed before being disconnected after transfer operations are completed.


§ 154.520 Closure devices.

(a) Except as provided in paragraph (b) of this section, each facility to which this part applies must have enough butterfly valves, wafer-type resilient seated valves, blank flanges, or other means acceptable to the COTP to blank off the ends of each hose or loading arm that is not connected for the transfer of oil or hazardous material. A suitable material in the joints and couplings shall be installed on each end of the hose assembly or loading arm not being used for transfer to ensure a leak-free seal.

(b) A new, unused hose, and a hose that has been cleaned and is gas free, is exempt from the requirements of paragraph (a) of this section.

(CGD 93–056, 61 FR 41459, Aug. 8, 1996)

§ 154.525 Monitoring devices.

The COTP may require the facility to install monitoring devices if the installation of monitoring devices at the facility would significantly limit the size of a discharge of oil or hazardous material and either:

(a) The environmental sensitivity of the area requires added protection;

(b) The products transferred at the facility pose a significant threat to the environment; or

(c) The size or complexity of the transfer operation poses a significant potential for a discharge of oil or hazardous material.


§ 154.530 Small discharge containment.

(a) Except as provided in paragraphs (c), (d), and (e) of this section, each facility to which this part applies must have fixed catchments, curbing, or other fixed means to contain oil or hazardous material discharged in at least—

(1) Each hose handling and loading arm area (that area on the facility that is within the area traversed by the free end of the hose or loading arm when moved from its normal stowed or idle position into a position for connection);

(2) Each hose connection manifold area; and

(3) Under each hose connection that will be coupled or uncoupled as part of the transfer operation during coupling, uncoupling, and transfer.

(b) The discharge containment means required by paragraph (a) of this section must have a capacity of at least:

(1) Two barrels if it serves one or more hoses of 6-inch inside diameter or smaller, or loading arms of 6-inch nominal pipe size diameter or smaller;

(2) Three barrels if it serves one or more hoses with an inside diameter of more than 6-inches, but less than 12 inches, or loading arms with a nominal pipe size diameter of more than 6 inches, but less than 12 inches; or