why it does not meet the requirements of this chapter.

- (f) No person may use any Operations Manual for transfer operations as required by this chapter unless the Operations Manual has been examined by the COTP.
- (g) The Operations Manual is voided if the facility operator—
- (1) Amends the Operations Manual without following the procedures in §154.320 of this part;
- (2) Fails to amend the Operations Manual when required by the COTP; or
- (3) Notifies the COTP in writing that the facility will be placed in caretaker status

[CGD 93-056, 61 FR 41459, Aug. 8, 1996]

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 standard B16.5, Steel Pipe Flanges and Flang Fittings, or standard B.16.24, Brass or Bronze Pipe Flanges, of the American National Standards Institute (ANSI); or
- (3) Quick-disconnect couplings that meet ASTM F 1122 (incorporated by reference, see §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"; or
- (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 §156.170.
- (g) The hose burst pressure and the pressure used for the test required by §156.170 of this chapter must not be marked on the hose and must be recorded elsewhere at the facility as described in paragraph (f) of this section.
- (h) Each hose used to transfer fuel to a vessel that has a fill pipe for which containment can not practically be provided must be equipped with an automatic back pressure shutoff noz-

[CGD 75–124, 45 FR 7172, Jan. 31, 1980, as amended by CGD 86–034, 55 FR 36253, Sept. 4, 1990; CGD 88–032, 56 FR 35820, July 29, 1991; CGD 92–027, 58 FR 39662, July 26, 1993; CGD 93–056, 61 FR 41459, Aug. 8, 1996; USCG–2000–7223, 65 FR 40057, June 29, 2000]

$\S 154.510$ 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.
- (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

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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.

[CGD 75–124, 45 FR 7172, Jan. 31, 1980, as amended by CGD 86–034, 55 FR 36253, Sept. 4, 19901

§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. Such hoses and/or loading arms must be blanked off during 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.

[CGD 75–124, 45 FR 7172, Jan. 31, 1980, as amended by CGD 86–034, 55 FR 36253, Sept. 4, 1990]

§ 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
- (3) Four barrels if it serves one or more hoses of 12-inch inside diameter or larger, or loading arms of 12-inch nominal pipe size diameter or larger.
- (c) The facility may use portable means of not less than ½ barrel capacity each to meet the requirements of paragraph (a) of this section for part or all of the facility if the COTP finds that fixed means to contain oil or hazardous material discharges are not feasible.
- (d) A mobile facility may have portable means of not less than five gallons capacity to meet the requirements of paragraph (a) of this section.
- (e) Fixed or portable containment may be used to meet the requirements of paragraph (a)(3) of this section.

[CGD 75–124, 45 FR 7172, Jan. 31, 1980, as amended by CGD 86–034, 55 FR 36253, Sept. 4, 1990; CGD 93–056, 61 FR 41460, Aug. 8, 1996]