(2) Nine spare bottles of air for the self-contained air-breathing apparatus, each having at least a 30 minute capacity.

(3) Eight steel-cored lifelines.

(4) Eight Type II or Type III flashlights constructed and marked in accordance with ASTM F 1014 (incorporated by reference, see §154.1).

(5) Three fire axes.


(7) Eight sets of boots and gloves that are made of rubber or other electrically non-conductive material.


(9) Five outfits that protect the skin from scalding steam and the heat of a fire, and that have a water resistant outer surface.

(10) Three chemical protective outfits that protect the wearers from the particular personnel hazards presented by the cargo vapor.

(c) When Table 4 references this section, a vessel carrying the listed cargo must have the following additional personnel protection equipment:

(1) Three self-contained, pressure-demand-type, air-breathing apparatus approved by the Mining Enforcement and Safety Administration (MESA) or the National Institute for Occupational Safety and Health (NIOSH), each having at least a 30 minute capacity.

(2) Nine spare bottles of air for the self-contained air-breathing apparatus, each having at least a 30 minute capacity.

(3) Three steel-cored lifelines.

(4) Three Type II or Type III flashlights constructed and marked in accordance with ASTM F 1014 (incorporated by reference, see §154.1).


(6) Three sets of boots and gloves that are made of rubber or other electrically non-conductive material.


(8) Three chemical protective outfits that protect the wearers from the particular personnel hazards presented by the cargo vapor.

§ 154.1405 Respiratory protection.

When Table 4 references this section, a vessel carrying the listed cargo must have:

(a) Respiratory protection equipment for each person on board that protects the person from the cargo vapor for at least 5 minutes; and

(b) Two additional sets of respiratory protection equipment that:

(1) Are stowed in the wheelhouse; and

(2) Protects the wearer from the cargo vapor for at least 5 minutes.

§ 154.1410 Decontamination shower.

When Table 4 references this section, a vessel carrying the listed cargo must have a decontamination shower and an eye wash that:

(a) Are on the weatherdeck; and

(b) Have their location marked EMERGENCY SHOWER in letters:

(1) 7.6 cm (3 in.) high; and

(2) 5.1 cm (2 in.) wide.

§ 154.1415 Air compressor.

Each vessel must have an air compressor to recharge the bottles for the air-breathing apparatus.

§ 154.1420 Stretchers and equipment.

Each vessel must have:

(a) Two stretchers or wire baskets; and

(b) Equipment for lifting an injured person from a cargo tank, hold, or void space.

§ 154.1430 Equipment locker.

One of each item of equipment under §§154.1400 and 154.1420 must be stowed in a marked locker:

(a) On the open deck in or adjacent to the cargo area; or

(b) In the accommodation house, near to a door that opens onto the main deck.