

**§ 127.503**

**33 CFR Ch. I (7-1-04 Edition)**

**§ 127.503 Training: General.**

The operator shall ensure that each of the following is met:

(a) All full-time employees have training in the following subjects:

(1) Basic LNG firefighting procedures.

(2) LNG properties and hazards.

(b) In addition to the training under paragraph (a) of this section, each person assigned for transfer operations has training in the following subjects:

(1) The examined *Operations Manual* and examined *Emergency Manual*.

(2) Advanced LNG firefighting procedures.

(3) Security violations.

(4) LNG vessel design and cargo transfer operations.

(5) LNG release response procedures.

(6) First aid procedures for—

(i) Frostbite;

(ii) Burns;

(iii) Cardio-pulmonary resuscitation; and

(iv) Transporting injured personnel.

(c) The personnel who received training under paragraphs (a) and (b) of this section receive refresher training in the same subjects at least once every five years.

**FIREFIGHTING**

**§ 127.601 Fire equipment: General.**

(a) Fire equipment and systems provided in addition to the requirements in this subpart must meet the requirements of this subpart.

(b) The following must be red or some other conspicuous color and be in locations that are readily accessible:

(1) Hydrants and standpipes.

(2) Hose stations.

(3) Portable fire extinguishers.

(4) Fire monitors.

(c) Fire equipment, if applicable, must bear the approval of Underwriters Laboratories, Inc., the Factory Mutual Research Corp., or the Coast Guard.

**§ 127.603 Portable fire extinguishers.**

Each marine transfer area for LNG must have—

(a) Portable fire extinguishers that meet 9-6.1 of NFPA 59A and Chapter 3 of NFPA 10; and

(b) At least one portable fire extinguisher in each designated parking area.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 88-049, 60 FR 39796, Aug. 3, 1995]

**§ 127.605 Emergency outfits.**

(a) There must be an emergency outfit for each person whose duties include fighting fires, but there must be at least two emergency outfits. Each emergency outfit must include—

(1) One explosion-proof flashlight;

(2) Boots and gloves of rubber or other electrically nonconducting material;

(3) A rigid helmet that protects the head against impact;

(4) Water resistant clothing that also protects the body against fire; and

(5) U.S. Bureau of Mines approved self-contained breathing apparatus.

(b) Emergency outfits under paragraph (a) of this section must be in locations that are readily accessible and marked for easy recognition.

**§ 127.607 Fire main systems.**

(a) Each marine transfer area for LNG must have a fire main system that provides at least two water streams to each part of the LNG transfer piping and connections, one of which must be from a single length of hose or from a fire monitor.

(b) The fire main must have at least one isolation valve at each branch connection and at least one isolation valve downstream of each branch connection to isolate damaged sections.

(c) The fire main system must have the capacity to supply—

(1) Simultaneously all fire hydrants, standpipes, and fire monitors in the system; and

(2) At a Pitot tube pressure of 618 kilonewtons per square meter (75 p.s.i.), the two outlets having the greatest pressure drop between the source of water and the hose or monitor nozzle, when only those two outlets are open.

(d) If the source of water for the fire main system is capable of supplying a pressure greater than the system's design working pressure, the system must have at least one pressure relief device.