

(i) Before electrical storms or uncontrolled fires are adjacent to the marine transfer area for LNG; and

(ii) As soon as a fire is detected; and

(4) Ensure that the lighting systems are turned on between sunset and sunrise.

NOTE: Vessel transfer requirements are published in 46 CFR Part 154.

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

#### § 127.321 Release of LNG.

(a) The operator of the waterfront facility handling LNG shall ensure that—

(1) No person releases LNG into the navigable waters of the United States; and

(2) If there is a release of LNG, vessels near the facility are notified of the release by the activation of the warning alarm.

(b) If there is a release of LNG, the person in charge of shoreside transfer operations shall—

(1) Immediately notify the person in charge of cargo transfer on the vessel of the intent to shutdown;

(2) Shutdown transfer operations;

(3) Notify the COTP of the release; and

(4) Not resume transfer operations until authorized by the COTP.

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

### MAINTENANCE

#### § 127.401 Maintenance: General.

The operator of the waterfront facility handling LNG shall ensure that the equipment required under this part is maintained in a safe condition so that it does not cause a release or ignition of LNG.

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

#### § 127.403 Inspections.

The operator shall conduct a visual inspection for defects of each pressure-relief device not capable of being tested, at least once each calendar year, with intervals between inspections not exceeding 15 months, and make all repairs in accordance with § 127.405.

#### § 127.405 Repairs.

The operator shall ensure that—

(a) Equipment repairs are made so that—

(1) The equipment continues to meet the applicable requirements in this subpart and in NFPA 59A; and

(2) Safety is not compromised; and

(b) Welding is done in accordance with NFPA 51B and NFPA 59A, Chapter 6, Section 6-3.4.

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

#### § 127.407 Testing.

(a) The operator shall pressure test under paragraph (b) of this section the transfer system, including piping, hoses, and loading arms, and verify the set pressure of the safety and relief valves—

(1) After the system or the valves are altered;

(2) After the system or the valves are repaired;

(3) After any increase in the MAWP; or

(4) For those components that are not continuously kept at cryogenic temperature, at least once each calendar year, with intervals between testing not exceeding 15 months.

(b) The pressure for the transfer system test under paragraph (a) of this section must be at 1.1 times the MAWP and be held for a minimum of 30 minutes.

#### § 127.409 Records.

(a) The operator shall keep on file the following information:

(1) A description of the components tested under § 127.407.

(2) The date and results of the test under § 127.407.

(3) A description of any corrective action taken after the test.

(b) The information required by this section must be retained for 24 months.

### PERSONNEL TRAINING

#### § 127.501 Applicability.

The training required by this subpart must be completed before LNG is transferred.

**§ 127.503**

**33 CFR Ch. I (7-1-05 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.