- (e) Each fire hydrant or standpipe must have at least one length of hose of sufficient length to meet paragraph (a) of this section.
 - (f) Each length of hose must-
- (1) Be $1\frac{1}{2}$ inches or more in diameter and 30.5 meters (100 feet) or less in length:
 - (2) Be on a hose rack or reel;
- (3) Be connected to the hydrant or standpipe at all times; and
- (4) Have a Coast Guard approved combination solid stream and water spray fire hose nozzle.

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

§ 127.609 Dry chemical systems.

- (a) Each marine transfer area for LNG must have a dry chemical system that provides at least two dry chemical discharges to the area surrounding the loading arms, one of which must be—
 - (1) From a monitor; and
- (2) Actuated and, except for preaimed monitors, controlled from a location other than the monitor location.
- (b) The dry chemical system must have the capacity to supply simultaneously or sequentially each hose or monitor in the system for 45 seconds.
- (c) Each dry chemical hose station must have at least one length of hose that—
 - (1) Is on a hose rack or reel; and
- (2) Has a nozzle with a valve that starts and stops the flow of dry chemical

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

§ 127.611 International shore connection.

The marine transfer area for LNG must have an international shore connection that is in accordance with ASTM F 1121 (incorporated by reference, see §127.003), a 2½ inch fire hydrant, and 2½ inch fire hose of sufficient length to connect the fire hydrant to the international shore connection on the vessel.

[CGD 88-032, 56 FR 35819, July 29, 1991, as amended by CGD 88-049, 60 FR 39796, Aug. 3, 1995; USCG-2000-7223, 65 FR 40057, June 29, 2000]

§127.613 Smoking.

In the marine transfer area for LNG, the operator shall ensure that no person smokes when there is LNG present.

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

§127.615 Fires.

In the marine transfer area for LNG, the operator shall ensure that there are no fires when there is LNG present.

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

§127.617 Hotwork.

The operator shall ensure that no person conducts welding, torch cutting, or other hotwork unless that person has a permit from the COTP.

SECURITY

§ 127.701 Security on existing facilities.

The operator shall ensure that any security procedure and arrangement on existing facilities, that were in use when LNG transfer operations were last conducted, be continued and maintained, or upgraded, whenever LNG transfer operations are conducted.

§ 127.703 Access to the marine transfer area for LNG.

The operator shall ensure that—

- (a) Access to the marine transfer area for LNG from the shoreside and the waterside is limited to—
- (1) Personnel who work at the waterfront facility handling LNG including persons assigned for transfer operations, vessel personnel, and delivery and service personnel in the course of their business;
 - (2) Coast Guard personnel; and
- (3) Other persons authorized by the operator; and
- (b) No person is allowed into the marine transfer area for LNG unless that person is identified by a waterfront facility handling LNG-issued identification card or other identification card displaying his or her photograph, or is

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an escorted visitor displaying an identifying badge.

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

§127.705 Security systems.

The operator shall ensure that security patrols of the marine transfer area for LNG are conducted once every hour, or that a manned television monitoring system is used, to detect—

- (a) Unauthorized personnel;
- (b) Fires: and
- (c) LNG releases.

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

§127.707 Security personnel.

The operator shall ensure that no person is assigned security patrol duty unless that person has been instructed on security violation procedures.

§ 127.709 Protective enclosures.

The following must be within a fence or wall that prevents trespassing:

- (a) Impounding spaces.
- (b) Control rooms and stations.
- (c) Electrical power sources.

§ 127.711 Communications.

The marine transfer area for LNG must have a means of direct communications between the security patrol and other operating or security personnel on duty on the waterfront facility handling LNG.

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

Subpart C—Waterfront Facilities Handling Liquefied Hazardous Gas

SOURCE: CGD 88–049, 60 FR 39796, Aug. 3, 1995, unless otherwise noted.

DESIGN AND CONSTRUCTION

§127.1101 Piping systems.

Each piping system within the marine transfer area for LHG used for the transfer of LHG must meet the following criteria:

- (a) Each system must be designed and constructed in accordance with ASME B31.3.
- (b) Each pipeline on a pier or wharf must be located so that it is not exposed to physical damage from vehicular traffic or cargo-handling equipment. Each pipeline under navigable waters must be covered or protected to meet 49 CFR 195.248.
- (c) The transfer manifold of each liquid transfer line and of each vapor return line must have an isolation valve with a bleed connection, such that transfer hoses and loading arms can be blocked off, drained or pumped out, and depressurized before disconnecting. Bleeds or vents must discharge to a safe area such as a tank or flare.
- (d) In addition to the isolation valve at the transfer manifold, each liquidtransfer line and each vapor return line must have a readily accessible isolation valve located near the edge of the marine transfer area for LHG.
- (e) Each power-operated isolation valve must be timed to close so that it will not produce a hydraulic shock capable of causing failure of the line or equipment. Unless the layout of the piping allows the isolation valve at the transfer manifold to close within 30 seconds without creating excessive stresses on the system, the layout must be reconfigured to reduce the stresses to a safe level.
- (f) Each waterfront facility handling LHG that transfers to or from a vessel requiring vapor return during transfer must be equipped with a vapor return line designed to attach to the vessel's vapor connection.
- (g) Where two or more LHGs are loaded or unloaded at the same facility, each manifold must be identified or marked to indicate each LHG it handles.
- (h) Each pipeline used to transfer flammable liquids or vapors must be provided with precautions against static, lightning, and stray current in accordance with API RP 2003.

§ 127.1102 Transfer hoses and loading arms.

(a) Each hose within the marine transfer area for LHG used for the transfer of LHG or its vapors to or from a vessel must—