§ 126.31

§126.31 Termination or suspension of general permit.

The Captain of the Port is hereby authorized to terminate or to suspend the general permit granted by §126.27 in respect to any particular designated waterfront facility whenever he deems that the security or safety of the port or vessels or waterfront facilities therein so requires. Confirmation of such termination or suspension shall be given to the permittee in writing. After such termination, the general permit may be revived by the District Commander with respect to such particular waterfront facility upon a finding by him that the cause of termination no longer exists and is unlikely to recur. After such suspension, the general permit shall be revived by the Captain of the Port with respect to such particular waterfront facility when the cause of suspension no longer exists, and he shall so advise the permittee in writing.

 $\lceil \text{CGFR} \ 51\text{--}37, \ 16 \ \text{FR} \ 8680, \ \text{Aug.} \ 28, \ 1951, \ \text{as} \$ amended by CGFR 69-89, 34 FR 17479, Oct. 29,

§126.33 Penalties for handling dangerous cargo without permit.

Handling, storing, stowing, loading, discharging, or transporting any dangerous cargo covered by §126.27 under circumstances not covered by the general permit granted in §126.27 or when such general permit is not in force will subject persons responsible therefor to the civil or criminal penalties provided in Section 13 of the Ports and Waterways Safety Act, as amended (33 U.S.C. sec. 1232).

[CGD 78-023, 44 FR 4644, Jan. 22, 1979]

§ 126.35 Primary responsibility.

Nothing contained in the rules, regulations, conditions, and designations in this part shall be construed as relieving the masters, owners, operators, and agents of vessels, docks, piers, wharves, or other waterfront facilities from their primary responsibility for the security of such vessels, docks, piers, wharves, or waterfront facilities.

[CGFR 51-37, 16 FR 8680, Aug. 28, 1951]

§126.37 Separability.

If any provision of the rules, regulations, conditions, or designations contained in this part or the application of such provision to any person, waterfront facility, or circumstances shall be held invalid, the validity of the remainder of the rules, regulations, conditions, or designations contained in this part and applicability of such provision to other persons, waterfront facilities, or circumstances, shall not be affected thereby.

[CGFR 51-37, 16 FR 8680, Aug. 28, 1951]

PART 127—WATERFRONT FACILITIES HANDLING LIQUEFIED NATURAL AND GAS LIQUEFIED HAZ-**ARDOUS GAS**

Subpart A—General

Sec.	
127.001	Applicability.
127.003	Incorporation by reference.
127.005	Definitions.
127.007	Letter of intent.
127.009	Letter of recommendation.
127.011	Inspections of waterfront facilities
105 010	G

127.013 Suspension of transfer operations.

127.015 Appeals.

Sec.

127 017 Alternatives.

Operations Manual and Emergency 127.019 Manual: Procedures for examination.

Subpart B—Waterfront Facilities Handlina **Liquefied Natural Gas**

127.101 Design and construction: General.

127.103 Piers and wharves.

127.105 Layout and spacing of marine transfer area for LNG.

127.107 Electrical power systems.

127.109 Lighting systems.

127.111 Communications systems.

127.113 Warning signs.

EQUIPMENT

127.201 Sensing and alarm systems.

127.203 Portable gas detectors.

127.205 Emergency shutdown.

127 207 Warning alarms.

OPERATIONS

127.301 Persons in charge of shoreside transfer operations: Qualifications and certification.

Compliance with suspension order. 127.303

127.305 Operations Manual.

127.307 Emergency Manual.

127.309 Operations Manual and Emergency Manual: Use.

Coast Guard, DOT § 127.001

Cousi Cuala, DOI	3 127.001
127.311 Motor vehicles. 127.313 Bulk storage. 127.315 Preliminary transfer inspection. 127.317 Declaration of inspection. 127.319 LNG transfer. 127.321 Release of LNG. MAINTENANCE 127.401 Maintenance: General. 127.403 Inspections. 127.405 Repairs.	 127.1307 Emergency Manual. 127.1309 Operations Manual and Emergency Manual: Use. 127.1311 Motor vehicles. 127.1313 Storage of hazardous materials. 127.1315 Preliminary transfer inspection. 127.1317 Declaration of Inspection. 127.1319 Transfer of LHG. 127.1321 Release of LHG. 127.1325 Access to marine transfer area for LHG.
127.407 Testing.	MAINTENANCE
127.409 Records. PERSONNEL TRAINING 127.501 Applicability. 127.503 Training: General.	127.1401 General. 127.1403 Inspections. 127.1405 Repairs. 127.1407 Tests. 127.1409 Records.
FIREFIGHTING	Emperatoring Followens
127.601 Fire equipment: General. 127.603 Portable fire extinguishers. 127.605 Emergency outfits. 127.607 Fire main systems. 127.609 Dry chemical systems. 127.611 International shore connection. 127.613 Smoking. 127.615 Fires.	FIREFIGHTING EQUIPMENT 127.1501 General. 127.1503 Portable fire extinguishers. 127.1505 Emergency response and rescue. 127.1507 Water systems for fire protection. 127.1509 Equipment for controlling and extinguishing fires. 127.1511 International shore connection.
127.617 Hotwork.	FIRE PROTECTION
SECURITY 127.701 Security on existing facilities. 127.703 Access to the marine transfer area for LNG. 127.705 Security systems. 127.707 Security personnel. 127.709 Protective enclosures. 127.711 Communications.	127.1601 Smoking. 127.1603 Hotwork. 127.1605 Other sources of ignition. AUTHORITY: 33 U.S.C. 1231; 49 CFR 1.46. SOURCE: CGD 78-038, 53 FR 3376, Feb. 7, 1988, unless otherwise noted.
Subpart C—Waterfront Facilities Handling	Subpart A—General
Liquefied Hazardous Gas	§ 127.001 Applicability.
DESIGN AND CONSTRUCTION 127.1101 Piping systems. 127.1102 Transfer hoses and loading arms. 127.1103 Piers and wharves. 127.1105 Layout and spacing of marine transfer area for LHG. 127.1107 Electrical systems. 127.1109 Lighting systems. 127.1111 Communication systems. 127.1113 Warning signs.	(a) Subparts A and B of this part apply to the marine transfer area for LNG of each new waterfront facility handling LNG and to new construction in the marine transfer area for LNG of each existing waterfront facility handling LNG. (b) Subpart A of this part and § 127.301 through 127.617 apply to the marine transfer area for LNG of each
EQUIPMENT	active existing waterfront facility han-
127.1203 Gas detection. 127.1205 Emergency shutdown. 127.1207 Warning alarms. 127.1209 Respiratory protection. OPERATIONS	dling LNG. (c) Sections 127.007 (c), (d), and (e); 127.019(b); and 127.701 of subparts A and B of this part apply to the marine transfer area for LNG of each inactive existing facility.
	(d) Subparts A and C of this part
 127.1301 Persons in charge of transfers for the facility: Qualifications and certification. 127.1302 Training. 127.1303 Compliance with suspension order. 127.1305 Operations Manual. 	apply to the marine transfer area for LHG of each active waterfront facility handling LHG. (e) Sections 127.007 (c), (d), and (e); 127.019(b); and 127.1325(c) of subparts A

and C of this part apply to the marine transfer area for LHG of each inactive facility.

[CGD 88-049, 60 FR 39794, Aug. 3, 1995]

§ 127.003 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in paragraph (b) of this section, the Coast Guard must publish notice of change in the Federal Register and make the material available to the public. All approved material is on file at the Office of the Federal Register, Room 700, 800 North Capitol Street NW., Washington, DC 20408, and at the U.S. Coast Guard, (G-MOC), Room 1108, 2100 Second Street SW., Washington, DC 20593-0001, and is available from the sources indicated in paragraph (b) of this section.

(b) The material approved for incorporation by reference in this part, and the sections affected, are:

1430 Broadway, New York, NY 10018:	
ANSI B16.5, Pipe Flanges and Flanged Fittings 1988, including 1992 Addenda	
and Errata	127.1102
ANSI S12.13, Part I, Performance Requirements, Combustible Gas Detectors,	
1986	127.1203
AMERICAN PETROLEUM INSTITUTE (API)	
1220 L Street NW., Washington, DC 20005:	
API RP 2003, Protection Against Ignitions Arising Out of Static, Lightning	105 1101
and Stray Currents, 1991	127.1101
AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)	
Three Park Avenue, New York, NY 10016-5990:	105 1101
ASME B31.3, Chemical Plant and Petroleum Refinery Piping, 1993	127.1101
AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)	
100 Barr Harbor Drive, West Conshohocken, PA 19428–2959. ASTM F 1121–87 (1993), Standard Specification for International Shore Con-	
nections for Marine Fire Applications	127.611;
nections for Marine Fire Applications	127.1511
NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)	121.1311
1 Batterymarch Park, Quincy, MA 02269:	
NFPA 10. Portland Fire Extinguishers. 1994	127.603:
112 1 12 10, 1 01 01010111 1 110 2110111 211011 1 1011	127.1503
NFPA 30, Flammable and Combustible Liquids Code, 1993	127.313;
•	127.1313
NFPA 51B, Fire Prevention in Use of Cutting and Welding Processes, 1994	127.405;
	127.1405
NFPA 59A, Production, Storage, and Handling of Liquefied Natural Gas	
(LNG), 1994	127.101;
	127.201;
	127.405;
	127.603
NFPA 70, National Electrical Code, 1993	127.107;
	127.201;
NEDA 051 Fine Floring Constant of Deciding Constant in and Material 1, 1999	127.1107
NFPA 251, Fire Tests of Building Construction and Materials, 1990	127.005

THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

[CGD 88-049, 60 FR 39794, Aug. 3, 1995; 60 FR 49509, Sept. 26, 1995, as amended by CGD 96-026, 61 FR 33665, June 28, 1996; 61 FR 36629, July 12, 1996; USCG-1999-5832, 64 FR 34714, June 29, 1999; USCG-1999-5151, 64 FR 67175, Dec. 1, 1999]

§127.005 Definitions.

As used in this part:

Active means accomplishing the transfer of LHG or LNG, or scheduling

one to occur, within 12 months of the

Captain of the Port (COTP) means the Coast Guard officer designated by the Commandant to command a Captain of the Port Zone as described in Part 3 of this chapter, or an authorized representative.

Coast Guard, DOT § 127.005

Commandant means the Commandant of the U.S. Coast Guard or an authorized representative.

Control room means a space within the LNG waterfront facility from which facility operations are controlled.

District Commander means the Coast Guard officer designated by the Commandant to command a Coast Guard District as described in Part 3 of this chapter, or an authorized representative.

Environmentally sensitive areas include public parks and recreation areas, wild-life and waterfowl refuges, fishing grounds, wetlands, other areas deemed to be of high value to fish and wildlife resources, historic sites, and other protected areas.

Existing as applied to a waterfront facility means a facility handling LNG constructed or being constructed under a contract awarded before June 2, 1988, or a facility handling LHG constructed or being constructed under a contract awarded before January 30, 1996.

Facility means either a waterfront facility handling LHG or a waterfront facility handling LNG.

Fire endurance rating means the duration for which an assembly or structural unit will contain a fire or retain structural integrity when exposed to the temperatures specified in the standard time-temperature curve in NFPA 251.

Flammable product means a product indicated by the letter "F" or by the letters "F+T" in Table 127.005.

Inactive means not active.

Impounding space means a space formed by dikes and floors that confines a spill of LHG or LNG.

LHG means liquefied hazardous gas. LHG vessel means a vessel constructed or converted to carry LHG, in

Liquefied hazardous gas (LHG) means a liquid containing one or more of the products listed in Table 127.005.

Liquefied natural gas (LNG) means a liquid or semisolid consisting mostly of methane and small quantities of ethane, propane, nitrogen, or other natural gases.

Liquefied petroleum gas (LPG) means a liquid consisting mostly of propane or butane or both.

LNG means liquefied natural gas.

LNG vessel means a vessel constructed or converted to carry LNG, in bulk.

Loading flange means the connection or group of connections in the cargo transfer pipeline on the facility that connects the facility pipeline to the vessel pipeline.

Marine transfer area for LHG means that part of a waterfront facility handling LHG between the vessel, or where the vessel moors, and the first shutoff valve on the pipeline immediately inland of the terminal manifold or loading arm, including the entire part of a pier or wharf used to serve LHG vessels.

Marine transfer area for LNG means that part of a waterfront facility handling LNG between the vessel, or where the vessel moors, and the last manifold or valve immediately before the receiving tanks.

Mating flange means that flange in the product-transfer pipeline on a waterfront facility handling LHG or a waterfront facility handling LNG that connects this pipeline to the pipeline or transfer hose of the vessel.

MAWP means maximum allowable working pressure.

Maximum allowable working pressure (MAWP) means the maximum gauge pressure permissible at the top of equipment, containers, or pressure vessels while operating at design temperature.

New as applied to a waterfront facility means a facility handling LNG constructed or being constructed under a contract awarded on or after June 2, 1988, or a facility handling LHG constructed or being constructed under a contract awarded on or after January 30, 1996.

Person in charge of transfer operations on the vessel is the person designated the person in charge of cargo transfer under 46 CFR 154.1831.

Release means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, except a minor release of

LHG or its vapor, that may occur during the routine handling of LHG. No release is minor if it creates an atmosphere that exceeds the Lower Flammable Limit (LFL) for a flammable product or any Permissible Exposure Limit (PEL) listed in 29 CFR 1910.1000, Table Z-1 or Z-2, for a toxic product.

Substructure means the deck of a pier or wharf and the structural components below that deck.

Toxic product means a product indicated by the letter "T" or by the letters "F+T" in Table 127.005.

Waterfront facility handling LHG means any structure on, in, or under the navigable waters of the United States, or any structure on land or any area on shore immediately adjacent to such waters, used or capable of being used to transfer liquefied hazardous gas, in bulk, to or from a vessel.

Waterfront facility handling LNG means any structure on, in, or under the navigable waters of the United States, or any structure on land or any area on shore immediately adjacent to such waters, used or capable of being used to transfer liquefied natural gas, in bulk, to or from a vessel.

TABLE 127.005—LIST OF PRODUCTS AND HAZARDS

Product	Hazard
Acetaldehyde	F+T
Ammonia, anhydrous	Т
Butadiene	F
Butanes	F
Butane and propane (mixtures)	F
Butylenes	F
Chlorine	Т
Dimethylamine	F+T
Ethane	F
Ethyl chloride	F+T
Ethylene	F
Ethylene oxide	F+T
Methyl-acetylene and propadiene (mixtures)	F
Methyl bromide	F+T
Methyl chloride	F+T
Propane	F
Propylene	F
Sulphur dioxide	Т
Vinyl chloride	F+T

Note: "F" indicates a flammable product. "T" indicates a toxic product. "F&T" indicates a product both flammable and toxic.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 88-049, 60 FR 39795, Aug. 3, 1995; CGD 97-023, 62 FR 33363, June 19, 1997]

§127.007 Letter of intent.

- (a) An owner who intends to build a new facility or the owner or operator who plans new construction on an existing facility, must submit a letter of intent that meets paragraph (d) of this section to the COTP of the zone in which the facility is or will be located, at least 60 days before construction begins.
- (b) The owner or operator of an active existing facility shall submit a letter of intent that meets paragraph (d) of this section to the COTP of the zone in which the facility is located.
- (c) An owner or operator of an inactive existing facility shall submit a letter of intent that meets paragraph (d) of this section to the COTP of the zone in which the facility is located, at least 60 days before transferring LHG or LNG.
- (d) Each letter of intent must contain—
- (1) The name, address, and telephone number of the owner and operator;
- (2) The name, address, and telephone number of the facility;
- (3) The physical location of the facility:
 - (4) A description of the facility;
- (5) The LHG or LNG vessels' characteristics and the frequency of LHG or LNG shipments to or from the facility; and
- (6) Charts showing waterway channels and identifying commercial, industrial, environmentally sensitive, and residential areas in and adjacent to the waterway used by the LHG or LNG vessels en route to the facility, within 25 kilometers (15.5 miles) of the facility.
- (e) The owner or operator who submits a letter of intent under paragraph (a), (b), or (c), shall notify the COTP in writing within 15 days if—
- (1) There is any change in the information submitted under paragraphs (d)(1) through (d)(5) of this section; or
- (2) No LHG or LNG transfer operations are scheduled within the next 12 months.

[CGD 78–038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 88–049, 60 FR 39795, Aug. 3, 10051

Coast Guard, DOT § 127.015

§ 127.009 Letter of recommendation.

After the COTP receives the letter of intent under §127.007 (a) or (c), the COTP issues a letter of recommendation to the owner or operator of the facility and to the state and local government agencies having jurisdiction, as to the suitability of the waterway for LHG or LNG marine traffic, based on the—

- (a) Information submitted under §§ 127.007 (d)(3) through (d)(6);
- (b) Density and character of marine traffic in the waterway;
- (c) Locks, bridges, or other manmade obstructions in the waterway;
- (d) Following factors adjacent to the facility:
- (1) Depths of the water.
- (2) Tidal range.
- (3) Protection from high seas.
- (4) Natural hazards, including reefs, rocks, and sandbars.
 - (5) Underwater pipelines and cables.
- (6) Distance of berthed vessel from the channel and the width of the channel.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 88-049, 60 FR 39795, Aug. 3, 1995]

Note: The Coast Guard is authorized by law to establish water or waterfront safety zones, or other measures for limited, controlled, or conditional access and activity, when necessary for the protection of any vessel, structure, waters, or shore area.

§ 127.011 Inspections of waterfront facilities.

The operator shall ensure that the COTP or his representative is allowed to make reasonable examinations and inspections to determine whether the facility meets this part.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 88-049, 60 FR 39795, Aug. 3, 1995]

§ 127.013 Suspension of transfer operations.

- (a) The COTP may issue an order to the operator to suspend LHG or LNG transfer operations if the COTP finds any condition requiring immediate action to—
- (1) Prevent damage to, or the destruction of, any bridge or other structure on or in the navigable waters of

the United States, or any land structure or shore area immediately adjacent to such waters; and

- (2) Protect the navigable waters and the resources therein from harm resulting from vessel or structure damage, destruction, or loss.
- (b) Each order to suspend transfer operations issued under paragraph (a) of this section—
 - (1) Is effective immediately;
- (2) Contains a statement of each condition requiring immediate action; and
- (3) Is withdrawn by the COTP whenever each condition is corrected or no longer exists.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 88-049, 60 FR 39795, Aug. 3, 1995]

§ 127.015 Appeals.

- (a) Any person directly affected by an action taken under this part may request reconsideration by the Coast Guard officer responsible for that action.
- (b) Except as provided under paragraph (e) of this section, any person not satisfied with a ruling made under the procedure contained in paragraph (a) of this section may—
- (1) Appeal that ruling in writing to the District Commander of the district in which the action was taken; and
- (2) Supply supporting documentation and evidence that the appellant wishes to have considered.
- (c) The District Commander issues a ruling after reviewing the appeal submitted under paragraph (b) of this section. Except as provided under paragraph (e) of this section, any person not satisfied with this ruling may—
- (1) Appeal that ruling in writing to the Assistant Commandant for Marine Safety and Environmental Protection, U.S. Coast Guard, Washington, DC 20593-0001; and
- (2) Supply supporting documentation and evidence that the appellant wishes to have considered.
- (d) The Assistant Commandant for Marine Safety and Environmental Protection issues a ruling after reviewing the appeal submitted under paragraph (c) of this section, which is final agency action.
- (e) If the delay in presenting a written appeal has an adverse impact on

the operations of the appellant, the appeal under paragraph (b) or (c) of this section—

- (1) May be presented orally; and
- (2) Must be submitted in writing within five days after the oral presentation—
- (i) With the basis for the appeal and a summary of the material presented orally; and
- (ii) To the same Coast Guard official who heard the oral presentation.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 96-026, 61 FR 33665, June 28, 1996; CGD 97-023, 62 FR 33363, June 19, 1997]

§127.017 Alternatives.

- (a) The COTP may allow alternative procedures, methods, or equipment standards to be used by an operator instead of any requirements in this part if—
- (1) The operator submits a written request for the alternative at least 30 days before facility operations under the alternative would begin, unless the COTP authorizes a shorter time; and
- (2) The alternative provides at least the same degree of safety provided by the regulations in this part.
- (b) The COTP approves or disapproves any alternative requested under paragraph (a) of this section—
- (1) In writing; or
- (2) Orally, with subsequent written confirmation.

§ 127.019 Operations Manual and Emergency Manual: Procedures for examination.

- (a) The owner or operator of an active existing facility shall submit two copies of the *Operations Manual* and of the *Emergency Manual* to the Captain of the Port of the zone in which the facility is located.
- (b) At least 30 days before transferring LHG or LNG, the owner or operator of a new or an inactive existing facility shall submit two copies of the Operations Manual and of the Emergency Manual to the Captain of the Port of the zone in which the facility is located, unless the manuals have been examined and there have been no changes since that examination.
- (c) If the COTP finds that the *Operations Manual* meets §127.305 or §127.1305 and that the Emergency Man-

ual meets §127.307 or §127.1307, the Captain of the Port returns a copy to the owner or operator marked "Examined by the Coast Guard".

(d) If the COTP finds that the *Operations Manual* or the *Emergency Manual* does not meet this part, the Captain of the Port returns the manual with an explanation of why it does not meet this part.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 88-049, 60 FR 39795, Aug. 3, 1995]

Subpart B—Waterfront Facilities Handling Liquefied Natural Gas

§ 127.101 Design and construction: General.

The marine transfer area for LNG must meet the following criteria in NFPA 59A:

- (a) Chapter 2, Sections 2–1.2 and 2–3.
- (b) Chapter 4, Section 4-1.3.
- (c) Chapter 6.
- (d) Chapter 7, Sections 7-6 and 7-7.
- (e) Chapter 8, except Sections 8-3, 8-5 and 8-7.2

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 88-049, 60 FR 39795, Aug. 3, 1995]

§127.103 Piers and wharves.

- (a) If the waterfront facility handling LNG is in a region subject to earthquakes, the piers and wharves must be designed to resist earthquake forces.
- (b) Substructures, except moorings and breasting dolphins, that support or are within 5 meters (16.4 feet) of any pipe or equipment containing LNG, or are within 15 meters (49.2 feet) of a loading flange, must—
 - (1) Be made of concrete or steel; and
- (2) Have a fire endurance rating of not less than two hours.
- (c) LNG or LPG storage tanks must have the minimum volume necessary for—
 - (1) Surge protection;
 - (2) Pump suction supply; or
 - (3) Other process needs.

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

§ 127.105 Layout and spacing of marine transfer area for LNG.

- (a) LNG impounding spaces must be located so that the heat flux from a fire over the impounding spaces does not cause structural damage to an LNG vessel moored or berthed at the waterfront facility handling LNG.
- (b) Each LNG loading flange must be located at least 300 meters (984.3 feet) from the following which are primarily intended for the use of the general public or railways:
- (1) Each bridge crossing a navigable waterway.
- (2) Each entrance to any tunnel under a navigable waterway.

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

§ 127.107 Electrical power systems.

- (a) The electrical power system must have a power source and a separate emergency power source, so that failure of one source does not affect the capability of the other source. The system must meet the National Electrical Code, NFPA 70.
- (b) The emergency power source must provide enough power for the operation of the—
 - (1) Emergency shutdown system;
 - (2) Communications equipment;
 - (3) Firefighting equipment; and
- (4) Emergency lighting.
- (c) If an auxiliary generator is used as an emergency power source, it must meet Section 700–12 of NFPA 70.

$\S 127.109$ Lighting systems.

- (a) The marine transfer area for LNG must have a lighting system and separate emergency lighting.
- (b) All outdoor lighting must be located or shielded so that it is not confused with any aids to navigation and does not interfere with navigation on the adjacent waterways.
- (c) The lighting system must provide an average illumination on a horizontal plane one meter (3.3 feet) above the deck that is—
- (1) 54 lux (five foot-candles) at any loading flange; and
- (2) 11 lux (one foot-candle) at each work area.
- (d) The emergency lighting must provide lighting for the operation of the—

- (1) Emergency shutdown system;
- (2) Communications equipment; and
- (3) Firefighting equipment.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 88-049, 60 FR 39795, Aug. 3, 1995]

§ 127.111 Communications systems.

- (a) The marine transfer area for LNG must have a ship-to-shore communication system and a separate emergency ship-to-shore communication system.
- (b) Each ship-to-shore communication system must be a dedicated system that allows voice communication between the person in charge of transfer operations on the vessel, the person in charge of shoreside transfer operations, and personnel in the control room.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 88-049, 60 FR 39795, Aug. 3, 1995]

§127.113 Warning signs.

- (a) The marine transfer area for LNG must have warning signs that—
 - (1) Meet paragraph (b) of this section;
- (2) Can be seen from the shore and the water; and
- (3) Have the following text:

Warning

Dangerous Cargo

No Visitors

No Smoking

No Open Lights

- (b) Each letter in the words on the sign must be—
 - (1) Block style;
 - (2) Black on a white background; and
 - (3) 7.6 centimeters (3 inches) high.

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

EQUIPMENT

§127.201 Sensing and alarm systems.

- (a) Fixed sensors must have audio and visual alarms in the control room and audio alarms nearby.
- (b) Fixed sensors that continuously monitor for LNG vapors must—
- (1) Be in each enclosed area where vapor or gas may accumulate; and
- (2) Meet Section 9-4 of NFPA 59A.

- (c) Fixed sensors that continuously monitor for flame, heat, or products of combustion must—
- (1) Be in each enclosed or covered Class I, Division 1, hazardous location defined in Section 500–5(a) of NFPA 70 and each area in which flammable or combustible material is stored; and
 - (2) Meet Section 9-4 of NFPA 59A.

§127.203 Portable gas detectors.

The marine transfer area for LNG must have at least two portable gas detectors capable of measuring 0-100% of the lower flammable limit of methane.

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

§127.205 Emergency shutdown.

Each transfer system must have an emergency shutdown system that—

- (a) Can be activated manually; and
- (b) Is activated automatically when the fixed sensors under §127.201(b) measure LNG concentrations exceeding 40% of the lower flammable limit.

§127.207 Warning alarms.

- (a) The marine transfer area for LNG must have a rotating or flashing amber light with a minimum effective flash intensity, in the horizontal plane, of 5000 candelas. At least 50% of the required effective flash intensity must be maintained in all directions from 1.0 degree above to 1.0 degree below the horizontal plane.
- (b) The marine transfer area for LNG must have a siren with a minimum ½-octave band sound pressure level at 1 meter of 125 decibels referenced to 0.0002 microbars. The siren must be located so that the sound signal produced is audible over 360 degrees in a horizontal plane.
- (c) Each light and siren must be located so that the warning alarm is not obstructed for a distance of 1.6 km (1 mile) in all directions.

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

§ 127.301 Persons in charge of shoreside transfer operations: Qualifications and certification.

OPERATIONS

- (a) No person may serve, and the operator of the waterfront facility handling LNG may not use the services of any person, as a person in charge of shoreside transfer operations, unless that person—
- (1) Has at least 48 hours of LNG transfer experience;
 - (2) Knows the hazards of LNG;
- (3) Knows the rules of this subpart; and
- (4) Knows the procedures in the examined *Operations Manual* and the examined *Emergency Manual*.
- (b) Before a person in charge of shoreside transfer operations supervises a transfer, the operator shall certify in writing that the criteria in paragraph (a) of this section are met. The operator shall maintain a copy of each current certification available for inspection at 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]

§ 127.303 Compliance with suspension order.

If an order to suspend is given to the operator or owner of the waterfront facility handling LNG, no LNG transfer operations may be conducted at the facility until the order is withdrawn by the COTP.

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

§127.305 Operations Manual.

Each Operations Manual must contain—

- (a) A description of the transfer system including mooring areas, transfer connections, control rooms, and diagrams of the piping and electrical systems:
- (b) The duties of each person assigned for transfer operations;

- (c) The maximum relief valve setting or maximum allowable working pressure of the transfer system:
- (d) The facility telephone numbers of facility supervisors, persons in charge of shoreside transfer operations, personnel on watch in the marine transfer area for LNG, and security personnel;
- (e) A description of the security systems for the marine transfer area for LNG:
 - (f) The procedures for-
- (1) Transfer operations including gauging, cool down, pumping, venting, and shutdown;
- (2) Transfer operations start-up and shutdown;
 - (3) Security violations; and
 - (4) The communications systems; and
- (g) A description of the training programs established under §127.503.

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

§127.307 Emergency Manual.

Each Emergency Manual must contain...

- (a) LNG release response procedures, including contacting local response organizations:
 - (b) Emergency shutdown procedures;
- (c) A description of the fire equipment and systems and their operating procedures:
- (d) A description of the emergency lighting and emergency power systems;
- (e) The telephone numbers of local Coast Guard units, hospitals, fire departments, police departments, and other emergency response organizations;
- (f) If the waterfront facility handling LNG has personnel shelters, the location of and provisions in each shelter;
- (g) First aid procedures and if there are first aid stations, the locations of each station; and
- (h) Emergency procedures for mooring and unmooring a vessel.

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

§ 127.309 Operations Manual and Emergency Manual: Use.

The operator shall ensure that—

(a) LNG transfer operations are not conducted unless the waterfront facil-

ity handling LNG has an examined *Operations Manual* and examined *Emergency Manual*;

- (b) Each transfer operation is conducted in accordance with the examined *Operations Manual*; and
- (c) Each emergency response is in accordance with the examined *Emergency Manual*.

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

§127.311 Motor vehicles.

- (a) The operator shall designate and mark parking spaces that—
 - (1) Do not block fire lanes;
 - (2) Do not impede any exits:
- (3) Are not located in any impounding space; and
- (4) Are not within 15 meters (49.2 feet) of any storage tank or loading flange.
- (b) During transfer operations, no person may—
- (1) Stop or park a motor vehicle in a space that is not designated a parking space; or
 - (2) Refuel any motor vehicle.

§ 127.313 Bulk storage.

- (a) The operator shall ensure that only the following flammable materials are stored in the marine transfer area for LNG:
 - (1) LNG.
 - (2) LPG.
 - (3) Vessel fuel.
 - (4) Oily waste from vessels.
- (5) Solvents, lubricants, paints, and other fuels in the amount used for one day's operations and maintenance.
- (b) Flammable liquids must be stored in accordance with Chapter 4 of NFPA 30.

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

§ 127.315 Preliminary transfer inspection.

Before transferring LNG, the person in charge of shoreside transfer operations shall—

(a) Inspect the transfer piping and equipment to be used during the transfer and replace any worn or inoperable parts;

- (b) For each of the vessel's cargo tanks from which cargo will be transferred, note the pressure, temperature, and volume to ensure they are safe for transfer:
- (c) Review and agree with the person in charge of cargo transfer on the vessel to—
- (1) The sequence of transfer operations;
 - (2) The transfer rate;
- (3) The duties, location, and watches of each person assigned for transfer operations; and
- (4) Emergency procedures from the examined *Emergency Manual*;
- (d) Ensure that transfer connections allow the vessel to move to the limits of its moorings without placing strain on the loading arm or transfer piping system;
- (e) Ensure that each part of the transfer system is aligned to allow the flow of LNG to the desired location;
- (f) Ensure that warning signs that warn that LNG is being transferred, are displayed:
- (g) Eliminate all ignition sources in the marine transfer area for LNG;
- (h) Ensure that personnel are on duty in accordance with the examined *Operations Manual*; and
- (i) Test the following to determine that they are operable:
 - (1) The sensing and alarm systems.
 - (2) The emergency shutdown system.
 - (3) The communication systems.

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

§127.317 Declaration of inspection.

- (a) After the preliminary transfer inspection under §127.315 has been satisfactorily completed, the person in charge of shoreside transfer operations shall ensure that no person transfers LNG until a Declaration of Inspection that meets paragraph (c) of this section is executed and signed in duplicate.
- (b) The person in charge of shoreside transfer operations shall give one signed copy of the Declaration of Inspection to the person in charge of transfer operations on the vessel, and shall retain one signed copy at the waterfront facility handling LNG for 30 days after completion of the transfer.

- (c) Each Declaration of Inspection must contain—
- (1) The name of the vessel and the waterfront facility handling LNG;
- (2) The date and time that transfer operations begin;
- (3) A list of the requirements in §127.315 with the initials of the person in charge of shoreside transfer operations after each requirement, indicating that the requirement is met:
- (4) The signature of the person in charge of shoreside transfer operations and the date and time of signing, indicating that he or she is ready to begin transfer operations; and
- (5) The signature of each relief person in charge and the date and time of each relief.

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

§127.319 LNG transfer.

During LNG transfer operations, the following must be met:

- (a) The operator of the waterfront facility handling LNG shall ensure that—
- (1) The marine transfer area for LNG is under the supervision of a person in charge, who has no other assigned duties during the transfer operation;
- (2) Personnel transferring fuel or oily waste are not involved in LNG transfer and
- (3) No vessels are moored outboard of any LNG vessel without the permission of the COTP.
- (b) The person in charge of shoreside transfer operations shall—
- (1) Be in continuous communication with the person in charge of transfer operations on the vessel;
- (2) Ensure that an inspection of the transfer piping and equipment for leaks, frost, defects, and other symptoms of safety and operational problems is conducted at least once every transfer:
- (3) Ensure that transfer operations are discontinued—
- (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.

Coast Guard, DOT § 127.503

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 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-pulminary 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.

$\S 127.603$ 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.
- (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

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.

$\S 127.709$ 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—

- (1) Be made of materials resistant to each LHG transferred, in both the liquid and vapor state (if wire braid is used for reinforcement, the wire must be of corrosion-resistant material, such as stainless steel);
- (2) Be constructed to withstand the temperature and pressure foreseeable during transfer, with a MAWP not less than the maximum pressure to which it may be subjected and at least 1030 kPa gauge (149.4 psig);
- (3) Be designed for a minimum bursting pressure of a least five times the MAWP;
 - (4) Have-
 - (i) Full-threaded connections;
 - (ii) Flanges that meet ANSI B16.5; or
- (iii) Quick connect couplings that are acceptable to the Commandant;
- (5) Be adequately supported against the weight of its constituent parts, the LHG, and any ice formed on it;
- (6) Have no kinks, bulges, soft spots, or other defects that will let it leak or burst under normal working pressure; and
- (7) Have a permanently attached nameplate that indicates, or otherwise be permanently marked to indicate—
- (i) Each LHG for which it is suitable;
- (ii) Its MAWP at the corresponding service temperature; and
- (iii) If used for service at other than ambient temperature, its minimum service temperature.
- (b) Each loading arm used for the transfer of LHG or its vapor must—
- (1) Be made of materials resistant to each LHG transferred, in both the liquid and vapor state:
- (2) Be constructed to withstand the temperature and pressure foreseeable during transfer;
- (3) Be adequately supported against the weight of its constituent parts, the LHG, and any ice formed on it;
- (4) Be provided with an alarm to indicate when it is approaching the limits of its extension, unless the examined Operations Manual requires a person to perform the same function; and
- (5) Have a permanently attached nameplate that indicates, or otherwise be permanently marked to indicate—
 - (i) Each LHG it may handle:
- (ii) Its MAWP at the corresponding service temperature; and,

(iii) If it is used for service at other than ambient temperature, its minimum service temperature.

§127.1103 Piers and wharves.

- (a) Each new waterfront facility handling LHG, and all new construction in the marine transfer area for LHG of each existing facility, must comply with the standards for seismic design and construction in 49 CFR part 41.
- (b) Each substructure on a new waterfront facility handling LHG, and all new construction in the marine transfer area for LHG of each existing facility, except moorings and breasting dolphins, that supports or is within 4.5 meters (14.8 feet) of any pipe or equipment containing a flammable LHG, or that is within 15 meters (49.2 feet) of a loading flange used to transfer a flammable LHG, must have a fire-endurance rating of not less than two hours.

§ 127.1105 Layout and spacing of marine transfer area for LHG.

Each new waterfront facility handling LHG, and all new construction in the marine transfer area for LHG of each existing facility, must comply with the following:

- (a) Each building, shed, and other structure within each marine transfer area for LHG must be located, constructed, or ventilated to prevent the accumulation of flammable or toxic gases within the structure.
- (b) Each impounding space for flammable LHGs located within the area must be designed and located so that the heat flux from a fire over the impounding space does not cause, to a vessel, damage that could prevent the vessel's movement.
- (c) Each manifold, loading arm, or independent mating flange must be located at least 60 meters (197 feet) from each of the following structures, if that structure is intended primarily for the use of the general public or of railways:
- (1) A bridge crossing a navigable waterway.
- (2) The entrance to, or the superstructure of, a tunnel under a navigable waterway.
- (d) Each manifold, loading arm, or independent mating flange must be located at least 30 meters (98.5 feet) from each public roadway or railway.

§127.1107 Electrical systems.

Electrical equipment and wiring must be of the kind specified by, and must be installed in accordance with. NFPA 70.

§127.1109 Lighting systems.

- (a) Each waterfront facility handling LHG, at which transfers of LHG take place between sunset and sunrise, must have outdoor lighting that illuminates the marine transfer area for LHG.
- (b) All outdoor lighting must be located or shielded so that it cannot be mistaken for any aids to navigation and does not interfere with navigation on the adjacent waterways.
- (c) The outdoor lighting must provide a minimum average illumination on a horizontal plane 1 meter (3.3 feet) above the walking surface of the marine transfer area that is-
- (1) 54 lux (5 foot-candles) at any loading flange; and
- (2) 11 lux (1 foot-candle) for the remainder of the marine transfer area for LHG.

§127.1111 Communication systems.

- (a) The marine transfer area for LHG must possess a communication system that enables continuous two way voice communication between the person in charge of transfer aboard the vessel and the person in charge of transfer for the facility.
- (b) The communication system required by paragraph (a) of this section may consist either of fixed or portable telephones or of portable radios. The system must be usable and effective in all phases of the transfer and all weather at the facility.
- (c) Devices used to comply with paragraph (a) of this section during the transfer of a flammable LHG must be listed as intrinsically safe by Underwriters Laboratories, Inc., Factory Mutual Research Corporation, or other independent laboratory recognized by NFPA, for use in the hazardous location in which it is used.

§127.1113 Warning signs.

- (a) The marine transfer area for LHG must have warning signs that—
- (1) Meet paragraph (b) of this section;
- (2) Can be seen from the shore and the water: and.

(3) Except as provided in paragraph (c) of this section, bear the following text:

Warning Dangerous Cargo No visitors No Smoking No Open Lights

high.

- (b) Each letter on the sign must be-
- (1) In block style:
- (2) Black on a white background; and (3) At least 7.6 centimeters (3 inches)
- (c) The words "No Smoking" and "No Open Lights" may be omitted when the product being transferred is not flammable.

EQUIPMENT

§127.1203 Gas detection.

- (a) Each waterfront facility handling LHG that transfers a flammable LHG must have at least two portable gas detectors, or a fixed gas detector, in the marine transfer area for LHG. Each detector must be capable of indicating whether the concentration of flammable vapors exceeds 30% of the Lower Flammable Limit for each flammable product being transferred and must meet ANSI S12.13, Part I.
- (b) Each waterfront facility handling LHG that transfers a toxic LHG, other than anhydrous ammonia, must have at least two portable gas detectors, or a fixed gas detector, available in the area. The detectors must be capable of showing whether the concentration of each toxic LHG being transferred is above, at, or below any Permissible Exposure Limit listed in 29 CFR 1910.1000, Table Z-1 or Z-2.
- (c) Each gas detector required by paragraph (a) or (b) of this section must serve to detect leaks, check structures for gas accumulations, and indicate workers' exposure to toxic gases in the area.

[CGD 88-049, 60 FR 39797, Aug. 3, 1995; 60 FR 49509, Sept. 26, 1995]

§ 127.1205 Emergency shutdown.

(a) Each piping system used to transfer LHG or its vapors to or from a vessel must have a quick-closing shutoff valve to stop the flow of liquid and vapor from the waterfront facility handling LHG if a transfer hose or loading

arm fails. This valve may be the isolation valve with a bleed connection required by §127.1101(c).

- (b) The valve required by paragraph (a) of this section must be located as near as practicable to the terminal manifold or loading-arm connection and must—
 - (1) Close on loss of power;
- (2) Close from the time of activation in 30 seconds or less;
- (3) Be capable of local manual closing and remotely controlled closing; and,
- (4) If the piping system is used to transfer a flammable LHG, either have fusible elements that melt at less than $105~^{\circ}\text{C}~(221~^{\circ}\text{F})$ and activate the emergency shutdown, or have a sensor that performs the same function.
- (c) A remote actuator for each valve must be located in a place accessible in an emergency, at least 15 meters (49.2 feet) from the terminal manifold or loading arm, and conspicuously marked with its designated function. When activated, the actuator must also automatically shut down any terminal pumps or compressors used to transfer LHG, or its vapors, to or from the vessel.

[CGD 88–049, 60 FR 39797, Aug. 3, 1995; 60 FR 49509, Sept. 26, 1995]

§127.1207 Warning alarms.

- (a) Each marine transfer area for LHG must have a rotating or flashing amber light that is visible for at least 1,600 meters (1 mile) from the transfer connection in all directions.
- (b) Each marine transfer area for LHG must also have a siren that is audible for at least 1,600 meters (1 mile) from the transfer connection in all directions.
- (c) Each light and siren required by this section must be located so as to minimize obstructions. If any obstruction will prevent any of these alarms from meeting paragraph (a) or (b) of this section, the operator of the waterfront facility handling LHG shall propose for approval by the local COTP additional or alternative warning devices that provide an equivalent level of safety.

[CGD 88-049, 60 FR 39798, Aug. 3, 1995; 60 FR 49509, Sept. 26, 1995]

§127.1209 Respiratory protection.

Each waterfront facility handling LHG must provide equipment for respiratory protection for each employee of the facility in the marine transfer area for LHG during the transfer of one or more of the following toxic LHGs; anhydrous ammonia, chlorine, dimethylamine, ethylene oxide, methyl bromide, sulphur dioxide, or vinyl chloride. The equipment must protect the wearer from the LHG's vapor for at least 5 minutes.

OPERATIONS

§ 127.1301 Persons in charge of transfers for the facility: Qualifications and certification.

- (a) No person may serve, or use the services of any person, as a person in charge of transfers for the facility regulated under this subpart, unless that person—
- (1) Has at least 48 hours' transfer experience with each LHG being transferred:
- (2) Knows the hazards of each LHG being transferred;
- (3) Knows the rules of this subpart; and
- (4) Knows the procedures in the examined Operations Manual and the examined Emergency Manual.
- (b) Before a person in charge of transfers for a waterfront facility handling LHG supervises a transfer of LHG, the operator of the facility shall certify in writing that that person has met the requirements in paragraph (a) of this section. The operator shall ensure that a copy of each current certification is available for inspection at the facility.

[CGD 88-049, 60 FR 39798, Aug. 3, 1995; 60 FR 49509, Sept. 26, 1995]

$\S 127.1302$ Training.

- (a) Each operator of a waterfront facility handling LHG shall ensure that each person assigned to act as a person in charge of transfers for the facility has training in the following subjects:
- (1) Properties and hazards of each LHG being transferred to or from the facility.
- (2) Use of the gas detectors required by §127.1203.

- (3) Use of the equipment for respiratory protection required by §127.1209.
- (4) Basic firefighting procedures, including the use of the portable fire extinguishers required by §127.1503.
- (5) Content and use of the examined Operations Manual and examined Emergency Manual.
- (6) The configuration and limitations of cargo systems of LHG vessels.
- (7) Procedures for transferring LHG to and from LHG vessels.
- (8) Procedures for response to a release of the LHG handled by the facility.
 - (9) First aid for persons—
 - (i) With burns;
- (ii) Needing cardio-pulmonary resuscitation;
- (iii) Exposed to toxic liquid or toxic vapors (if a toxic LHG is handled by the facility); and
- (iv) Needing transport to a medical facility.
- (10) Restrictions on access to the marine transfer area for LHG.
- (b) Each person that receives training under paragraph (a) of this section shall receive refresher training in the same subjects at least once every 5 years.
- (c) The operator shall maintain, for each person trained, a record of all training provided under paragraphs (a) and (b) of this section. The operator shall retain these records for the duration of the person's employment on the waterfront facility plus 12 months.
- (d) Training conducted to comply with the hazard communication programs required by the Occupational Safety and Health Administration (OSHA) of the Department of Labor [29 CFR 1910.120] or the Environmental Protection Agency (EPA) [40 CFR 311.1] may be used to satisfy the requirements in paragraph (a) of this section, so far as the training addresses the requirements in paragraph (a) of this section.

§ 127.1303 Compliance with suspension order.

If the COTP issues to the owner or operator of a waterfront facility handling LHG an order to suspend a transfer, no transfer may take place at the facility until the COTP withdraws the order.

§127.1305 Operations Manual.

Each Operations Manual must contain—

- (a) A description of each liquid-transfer system and vapor transfer system, including each mooring area, transfer connection, and (where installed) control room, and a diagram of the piping and electrical systems;
- (b) The duties of each person assigned to transfers;
- (c) The maximum relief-valve setting or MAWP of the transfer system;
- (d) The telephone numbers of supervisors, persons in charge of transfers for the facility, persons on watch in the marine transfer area for LHG, and security personnel of the facility;
- (e) A description for each security system provided for the transfer area;
- (f) A description of the training programs established under §127.1302;
- (g) The procedures to follow for security violations; and
- (h) For each LHG handled, the procedures for transfer that include—
- (1) Requirements for each aspect of the transfer (start-up, gauging, cooldown, pumping, venting, and shutdown);
 - (2) The maximum transfer rate;
- (3) The minimum transfer temperature;
- (4) Requirements for firefighting equipment; and
 - (5) Communication procedures.

§ 127.1307 Emergency Manual.

- (a) Each Emergency Manual must contain—
- (1) For each LHG handled-
- (i) A physical description of the LHG;
- (ii) A description of the hazards of the LHG;
- (iii) First-aid procedures for persons exposed to the LHG or its vapors;
- (iv) The procedures for response to a release of the LHG; and,
- (v) If the LHG is flammable, the procedures for fighting a fire involving the LHG or its vapors;
- (2) A description of the emergency shutdown required by §127.1205;
- (3) The procedures for emergency shutdown;

- (4) A description of the number, kind, place, and use of the fire equipment required by \$127.1501(a) and of the portable fire extinguishers required by \$127.1503:
- (5) The telephone numbers of local Coast Guard units, hospitals, fire departments, police departments, and other emergency-response organizations;
- (6) If the facility has personnel shelters, the place of and provisions in each shelter:
- (7) If the facility has first-aid stations, the location of each station;
- (8) Emergency procedures for mooring and unmooring a vessel; and,
- (9) If an off-site organization is to furnish emergency response, a copy of the written agreement required by \$127.1505(a)(2).
- (b) The employee-emergency plan and fire-prevention plan required by OSHA in 29 CFR 1910.38 may be used to comply with this section to the extent that they address the requirements specified in paragraphs (a) (1) through (9) of this section.

[CGD 88-049, 60 FR 39799, Aug. 3, 1995; 60 FR 49509, Sept. 26, 1995]

§ 127.1309 Operations Manual and Emergency Manual: Use.

Each operator of a waterfront facility handling LHG shall ensure that—

- (a) No transfer is conducted unless the facility has an examined Operations Manual and an examined Emergency Manual;
- (b) Each transfer is conducted in accordance with the examined Operations Manual; and
- (c) Each emergency response is conducted in accordance with the examined Emergency Manual.

§ 127.1311 Motor vehicles.

- (a) When LHG is being transferred or stored in the marine transfer area of a waterfront facility handling LHG, the operator shall ensure that no person—
- (1) Stops or parks a motor vehicle in a space other than a designated parking space:
- (2) Refuels a motor vehicle within the area: or
- (3) Operates a vehicle or other mobile equipment that constitutes a potential source of ignition within 15 meters (49.2

- feet) of any storage container, manifold, loading arm, or independent mating flange containing a flammable liquid or vapor.
- (b) If motor vehicles are permitted to stop in the marine transfer area for LHG, the operator shall designate and mark parking spaces that—
 - (1) Do not block fire lanes:
- (2) Do not impede any entrances or exits: and
- (3) Are not located within 15 meters (49.2 feet) of any storage container, manifold, loading arm, or independent mating flange containing a flammable liquid or vapor.

§ 127.1313 Storage of hazardous materials.

- (a) Each operator of a waterfront facility handling LHG shall ensure that no materials listed in the table of hazardous materials under 49 CFR 172.101, except for the following, are stored in the marine transfer area for LHG:
 - (1) The LHG being transferred.
- (2) Fuel required by the vessel, or by emergency equipment in the area.
 - (3) Oily wastes received from vessels.
- (4) Solvents, lubricants, paints and similar materials in the amount required for one day's operations and maintenance.
- (b) The operator shall ensure that flammable liquids not stored in bulk are stored in accordance with Chapter 4 of NFPA 30.

§ 127.1315 Preliminary transfer inspection.

Before each transfer, the person in charge of transfer for the facility shall—

- (a) Inspect piping and equipment within the marine transfer area for LHG to be used for transfer and ensure that it meets the requirements in this part;
- (b) Determine the contents, pressure, temperature, and capacity of each storage tank to or from which LHG will be transferred, to ensure that it is safe for transfer.
- (c) Confer with the person in charge of transfer aboard the vessel, to review and agree on—
- (1) The sequence of acts required for transfer:

- (2) The rate, maximum working pressure, and minimum working temperature of transfer:
- (3) The duties, stations, and watches of each person assigned for transfer; and
- (4) The emergency procedures in the examined Emergency Manual;
- (d) Ensure that the vessel is securely moored and that the transfer connections allow it to move to the limits of its moorings without placing a strain on the piping, hose, or loading arm used for transfer:
- (e) Ensure that each part of the transfer system is aligned to allow the flow of LHG to the desired place;
- (f) Ensure the display of the warning signs required by §127.1113;
- (g) Ensure that the requirements of this part concerning smoking and fire protection are met:
- (h) Ensure that qualified personnel are on duty in accordance with the examined Operations Manual and §§ 127.1301 and 127.1302; and
- (i) Test the following to determine that they are operable:
- (1) The communication system required by §127.1111.
- (2) The gas detectors required by §127.1203.

§ 127.1317 Declaration of Inspection.

- (a) Each person in charge of transfer for the facility shall ensure that no person transfers LHG to or from a vessel until a Declaration of Inspection that meets paragraph (c) of this section is executed and signed by both the person in charge aboard the vessel and the person in charge for the facility.
- (b) No person in charge of transfer for the facility may sign the Declaration unless that person has fulfilled the requirements of §127.1315 and has indicated fulfillment of each requirement by writing his or her initials in the appropriate space on the Declaration.
 - (c) Each Declaration must contain—
- (1) The name of the vessel and that of the facility:
- (2) The date and time that the transfer begins:
- (3) A list of the requirements in §127.1315 with the initials of both the person in charge aboard the vessel and the person in charge for the facility

- after each requirement, indicating the fulfillment of the requirement;
- (4) The signatures of both the person in charge aboard the vessel and the person in charge for the facility, and the date and time of signing, indicating that they are both ready to begin transfer; and
- (5) The signature of each relief person in charge and the date and time of each relief.
- (d) The person in charge of transfer for the facility shall give one signed copy of the Declaration to the person in charge of transfer aboard the vessel and retain the other.
- (e) Each operator of a facility shall retain a signed copy of the Declaration at the facility for 30 days after the transfer.

§ 127.1319 Transfer of LHG.

- (a) The operator of a waterfront facility handling LHG shall notify the COTP of the time and place of each transfer of LHG in bulk at least 4 hours before it begins.
- (b) During transfer, each operator of a waterfront facility handling LHG shall ensure that—
- (1) The marine transfer area for LHG is under the supervision of a person in charge certified for transfers of LHG, who has no other assigned duties during the transfer;
- (2) The person in charge supervises transfers only to or from one vessel at a time unless authorized by the COTP.
- (3) No person transferring fuel or oily waste is involved in the transfer; and
- (4) No vessel is moored outboard of any LHG vessel unless allowed by the COTP or the examined Operations Manual of the facility.
- (c) During transfer, each person in charge of transfer for the facility shall—
- (1) Maintain communication with the person in charge of transfer aboard the LHG vessel;
- (2) Ensure that an inspection of the transfer piping and equipment for leaks, frost, defects, and other threats to safety takes place at least once every transfer;
 - (3) Ensure that—
- (i) Transfer of LHG is discontinued as soon as a release or fire is detected in the area or aboard the vessel; and

- (ii) Transfer of flammable LHG is discontinued when electrical storms or uncontrolled fires approach near the area; and
- (4) Ensure that the outdoor lighting required by §127.1109 is turned on between sunset and sunrise.
- (d) Upon completion of transfer of LHG, each operator of a waterfront facility handling LHG shall ensure that hoses and loading arms used for transfer are drained of LHG residue and depressurized before disconnecting from the vessel.

NOTE TO §127.1319: Corresponding standards for vessels appear at 46 CFR part 154.

§127.1321 Release of LHG.

- (a) Each operator of a waterfront facility handling LHG shall ensure that—
- (1) No person intentionally releases LHG into the environment; and
- (2) If a release of LHG or its vapor threatens vessels or persons outside the marine transfer area for LHG, they are notified by the warning devices.
- (b) If LHG or its vapor is released, the person in charge of transfer for the facility shall—
- (1) Immediately notify the person in charge of transfer aboard the vessel that transfer must be shut down;
- (2) Shut down transfer in coordination with the person aboard the vessel;
- (3) Notify the COTP of the release; and
- (4) Not resume transfer until authorized by the COTP.

§ 127.1325 Access to marine transfer area for LHG.

Each operator of a waterfront facility handling LHG shall ensure that—

- (a) Access to the marine transfer area for LHG from shoreside and waterside is limited to—
- (1) Personnel who work in the area, transfer personnel, vessel personnel, and delivery and service personnel in the course of their business;
- (2) Federal, State, and local officials; and
- (3) Other persons authorized by the operator:
- (b) Each person allowed into the area is positively identified as someone authorized to enter and that each person other than an employee of the facility displays an identifying badge;

- (c) Guards are stationed, and fences or other devices are installed, to prevent, detect, and respond to unauthorized access, fires, and releases of LHG in the area, except that alternative measures approved by the COTP (such as electronic monitoring or random patrols) will be sufficient where the stationing of guards is impracticable; and
- (d) Coast Guard personnel are allowed access to the facility, at any time, to make any examination or to board any vessel moored at the facility.

MAINTENANCE

§127.1401 General.

Each operator of a waterfront facility handling LHG shall ensure that all cargo handling equipment is operable, and that no equipment that may cause the release or ignition of LHG is used in the marine transfer area for LHG.

§127.1403 Inspections.

- (a) Each operator of a waterfront facility handling LHG shall conduct a visual inspection for defects of each pressure relief device not capable of being tested
- (b) The operator shall conduct the inspection required by paragraph (a) of this section at least once each calendar year, with intervals between inspections not exceeding 15 months.

§127.1405 Repairs.

Each operator of a waterfront facility handling LHG shall ensure that—

- (a) Equipment is repaired so that—
- (1) The equipment continues to meet the applicable requirements in this subpart; and
 - (2) Safety is not compromised; and
- (b) Welding and cutting meet NFPA 51B.

§127.1407 Tests.

- (a) Each operator of a waterfront facility handling LHG shall conduct a static liquid-pressure test of the piping, hoses, and loading arms of the LHG-transfer system located in the marine transfer area for LHG, and shall verify the set pressure of the safety and relief valves—
- (1) After the system or the valves are altered:

- (2) After major repairs to the system or the valves;
- (3) After any increase in the MAWP of the system; and
- (4) At least once each calendar year, with intervals between tests not exceeding 15 months.
- (b) The pressure for the test under paragraph (a) of this section must be at least 1.1 times the MAWP and last for at least 30 minutes.
- (c) The operator shall conduct a test of each pressure gauge, to ensure that the displayed pressure is within 10 percent of the actual pressure, at least once each calendar year, with intervals between tests not exceeding 15 months.
- (d) The operator shall conduct a test of each item of remote operating or indicating equipment, such as a remotely operated valve, at least once each calendar year, with intervals between tests not exceeding 15 months.
- (e) The operator shall conduct a test of the emergency shutdown required by §127.1205 at least once every two months, to ensure that it will perform as intended. If transfers of LHG occur less often than every two months, the operator may conduct this test before each transfer instead of every two months.
- (f) The operator shall conduct a test of the warning alarm required by §127.1207 at least once every six months, to ensure that it will perform as intended. If transfers of LHG occur less often than every six months, the operator may conduct this test before each transfer instead of every six months

§ 127.1409 Records.

- (a) Each operator of a waterfront facility handling LHG shall keep on file:
- (1) A description of the components inspected or tested under §127.1403 or 127.1407.
- (2) The date and results of each inspection or test under §127.1403 or 127.1407
- (3) A description of any repair made after the inspection or test.
- (4) The date and a description of each alteration or major repair to the LHG transfer system or its valves.
- (b) The operator shall keep this information on file for at least 24 months

after the inspection, test, alteration, or major repair.

FIREFIGHTING EQUIPMENT

§127.1501 General.

- (a) The number, kind, and place of equipment for fire detection, protection, control, and extinguishment must be determined by an evaluation based upon sound principles of fire-protection engineering, analysis of local conditions, hazards within the waterfront facility handling LHG, and exposure to other property. A description of the number, kind, place, and use of fire equipment determined by this evaluation must appear in the Emergency Manual for each facility. The evaluation for each new facility and for all new construction on each existing facility must be submitted to the COTP for review when the emergency manual is submitted under §127.1307.
- (b) All fire equipment for each facility must be adequately maintained, and periodically inspected and tested, so it will perform as intended.
- (c) The following must be red or some other conspicuous color and be in places that are readily accessible:
 - (1) Hydrants and standpipes.
 - (2) Hose stations.
 - (3) Portable fire extinguishers.
 - (4) Fire monitors.
- (d) Fire equipment must bear the approval, if applicable, of Underwriters Laboratories, Inc., Factory Mutual Research Corporation, or other independent laboratory recognized by NFPA.

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-1999-5832, 64 FR 34714, June 29, 1999]

§ 127.1503 Portable fire extinguishers.

Each operator of a waterfront facility handling LHG must provide portable fire extinguishers of appropriate, number, size, and kind in the marine transfer area for LHG in accordance with NFPA 10.

§ 127.1505 Emergency response and rescue.

(a) Each waterfront facility handling LHG must arrange for emergency response and rescue pending the arrival of resources for firefighting or pollution control. Response and rescue may be performed by facility personnel or by an off-site organization.

- (1) If response and rescue are performed by facility personnel, appropriate training and equipment for personnel protection must be furnished to those personnel. Training and equipment that meets 29 CFR 1910.120, hazardous-waste operations and emergency response, will be appropriate.
- (2) If response and rescue are performed by an off-site organization, the organization must enter into a written agreement with the facility indicating the services it will perform and the time within which it will perform them to injured or trapped personnel.
 - (b) [Reserved]

§127.1507 Water systems for fire protection.

- (a) Each waterfront facility handling LHG must have a supply of water and a means for distributing and applying the water to protect personnel; to cool storage tanks, equipment, piping, and vessels; and to control unignited leaks and spills in the marine transfer area for LHG except when the evaluation required by §127.1501(a) indicates otherwise. The evaluation must address fire protection for structures, cargo, and vessels. Each water system must include on the pier or wharf at least one 2½-inch supply line, one 2½-inch fire hydrant, and enough 2½-inch hose to connect the hydrant to the vessel.
- (b) Each water system must fully and simultaneously supply, for at least 2 hours, all fixed fire-protection systems, including monitor nozzles, at their designed flow and pressure for the worst single incident foreseeable, plus 63 L/s (1000 gpm) for streams from hand-held hoses.

§ 127.1509 Equipment for controlling and extinguishing fires.

(a) Within each marine transfer area for LHG of each waterfront facility handling LHG that transfers a flammable LHG, portable or wheeled fire extinguishers suitable for gas fires, preferably dry chemical extinguishers, must be available at strategic sites, as determined by the evaluation required by \$127.1501(a).

- (b) Fixed systems for extinguishing or controlling fires may be appropriate for protection against particular hazards. The evaluation required by §127.1501(a) may specify the use of one or more of the following fixed systems:
- (1) Low-, medium-, or high-expansion foam.
 - (2) Dry chemicals.
- (3) Water applied as deluge, spray, or sprinkle.
- (4) Carbon dioxide.
- (5) Other NFPA approved fire extinguishing media.

§ 127.1511 International shore connection.

Each marine transfer area for LHG that receives foreign flag vessels must have an international shore connection meeting the requirements of ASTM F 1121 (incorporated by reference, see § 127.003).

[CGD 88–049, 60 FR 39796, Aug. 3, 1995, as amended by USCG–2000–7223, 65 FR 40057, June 29, 2000]

FIRE PROTECTION

§127.1601 Smoking.

Each operator of a waterfront facility handling LHG shall ensure that no person smokes in the marine transfer area for LHG unless—

- (a) Neither flammable LHG nor its vapors are present in the area; and
- (b) The person is in a place designated and marked in accordance with local law.

§127.1603 Hotwork.

Each operator of a waterfront facility handling LHG shall ensure that no person conducts welding, torch cutting, or other hotwork on the facility, or on a vessel moored to the facility, unless—

- (a) The COTP has issued a permit for that hotwork; and
- (b) The conditions of the permit are met.

§ 127.1605 Other sources of ignition.

Each operator of a waterfront facility handling LHG shall ensure that in the marine transfer area for LHG—

(a) There are no open fires or open flame lamps;

Pt. 128

- (b) Heating equipment will not ignite combustible material;
- (c) Each chimney and appliance has a spark arrestor if it uses solid fuel or is located where sparks may ignite combustible material; and
- (d) All rubbish, debris, and waste go into appropriate receptacles.

[CGD 88–049, 60 FR 39796, Aug. 3, 1995, as amended by CGD 97–023, 62 FR 33363, June 19, 1997]

PART 128—SECURITY OF PASSENGER TERMINALS

Subpart A—General

Sec.

128.100 Does this part apply to me?

128.110 Definitions.

128.120 Incorporation by reference.

Subpart B—Security Program

128.200 What must my Terminal Security Plan cover?

128.210 What are the responsibilities of my terminal security officer?

128.220 What must I do to report an unlawful act and related activity?

Subpart C—Plans and Procedures for Terminal Security

128.300 What is required to be in a Terminal Security Plan?

128.305 Who must submit a Terminal Security Plan?

128.307 What is the procedure for examination?

128.309 What do I do if I need to amend my Terminal Security Plan?

128.311 What is my right of appeal?

AUTHORITY: 33 U.S.C. 1231; 49 CFR 1.46.

SOURCE: CGD 91-012, 61 FR 37654, July 18, 1996, unless otherwise noted.

EDITORIAL NOTE: For a document relating to clarification of part 128, see 61 FR 51597, Oct. 3, 1996.

Subpart A—General

§ 128.100 Does this part apply to me?

This part applies to all passenger terminals in the United States or its territories when being used for the assembling, processing, embarking, or disembarking of passengers or baggage for passenger vessels over 100 gross tons, carrying more than 12 passengers for hire; making a voyage lasting more

than 24 hours, any part of which is on the high seas. It does not apply to terminals when serving ferries that hold Coast Guard Certificates of Inspection endorsed for "Lakes, Bays, and Sounds", and that transit international waters for only short periods of time, on frequent schedules.

§ 128.110 Definitions.

The definitions in part 120 of this chapter apply to this part, except for the definition of *You*. As used in this part:

You means the owner or operator of a passenger terminal.

[CGD 91-012, 63 FR 53591, Oct. 6, 1998]

§ 128.120 Incorporation by reference.

- (a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. To enforce any edition other than that specified in paragraph (b) of this section, the Coast Guard must publish notice of change in the FEDERAL REGISTER and must make the material available to the public. All approved material may be inspected at the Office of the Federal Register, 800 North Capitol Street NW., Suite 700, Washington, DC, and at the U.S. Coast Guard, (G-MES), 2100 Second Street SW., Washington, DC. Copies may be obtain from IMO, 4 Albert Embankment, London SE1 7 SR.
- (b) The materials approved for incorporation by reference in this part and the sections affected are:

INTERNATIONAL MARITIME ORGANIZATION (IMO)

4 Albert Embankment, London SE1 7SR

MSC Circular 443, Measures to Prevent Unlawful Acts Against Passengers and Crews on Board Ships September 26, 1986—128.220, 128.300

Subpart B—Security Program

§ 128.200 What must my Terminal Security Plan cover?

(a) If this part applies to your passenger terminal, you must implement for that terminal a program that—