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Title 33 —Navigation and Navigable Waters
Chapter I —Coast Guard, Department of Homeland Security
Subchapter L —Waterfront Facilities

Part 127 Waterfront Facilities Handling Liquefied Natural Gas and Liquefied Hazardous Gas

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PART 127—WATERFRONT FACILITIES HANDLING LIQUEFIED NATURAL GAS AND LIQUEFIED HAZARDOUS GAS

Authority: 33 U.S.C. 1504(j)(2); 46 U.S.C. 70011 and 70034; 46 U.S.C. Chapter 701; DHS Delegation No. 00170.1, Revision No. 01.2, paragraph (II)(92)(a).

Source: CGD 78-038, 53 FR 3376, Feb. 7, 1988, unless otherwise noted.

Subpart A—General

§ 127.001 Applicability.

(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 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 active existing waterfront facility handling LNG.

(c) Sections 127.007(b), (c), and (d), and 127.019(b) of subpart A of this part apply to the marine transfer area for LNG of each inactive facility.

(d) Subparts A and C of this part apply to the marine transfer area for LHG of each active waterfront facility handling LHG.

(e) Sections 127.007 (b), (c), and (d); 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.

(f) Waterfront facilities handling LNG and LHG constructed, expanded, or modified under a contract awarded after March 4, 2022, are required to comply with the applicable standards referenced in § 127.003. All other facilities, unless expanded or modified in accordance with this part, are required to meet previously applicable standards but may request to apply a later edition of the standards in accordance with § 127.017.

[CGD 88-049, 60 FR 39794, Aug. 3, 1995, as amended by USCG-2007-27022, 75 FR 29426, May 26, 2010; 87 FR 5689, Feb. 2, 2022]

§ 127.003 Incorporation by reference.

Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Coast Guard must publish a document in the FEDERAL REGISTER and the material must be available to the public. All approved material is available for inspection at the U.S. Coast Guard, Office of Operating and Environmental Standards (CG-OES), 2703 Martin Luther King Jr. Avenue SE, STOP 7509, Washington, DC 20593-7509, 202-372-1410, and is available from the sources listed in the following paragraphs. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email *fr.inspection@nara.gov* or go to *https://www.archives.gov/federal-register/cfr/ibr-locations.html*. (See § 127.017 for alternative compliance methods.)

(a) American Petroleum Institute (API), 200 Massachusetts Avenue NW, Suite 1100, Washington, DC 20001-5571, 202-682-8000, *http://www.api.org*.

(1) API Recommended Practice 2003 ("API RP 2003"), Protection Against Ignitions Arising Out of Static, Lightning and Stray Currents, Eighth Edition, September 2015, for § 127.1101(h).

(2) [Reserved]

(b) The American Society of Mechanical Engineers (ASME), Two Park Avenue, New York, NY 10016-5990, 800-843-2763, *https://www.asme.org*.

(1) ASME B16.5-2020, Pipe Flanges and Flanged Fittings, NPS $^{1}/_{2}$ Through NPS 24 Metric/Inch Standard, Issued January 29, 2021, for § 127.1102(a).

(2) ASME B31.3-2020, Process Piping, ASME Code for Pressure Piping, B31, Issued June 18, 2021, for § 127.1101(a).

(c) ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA, 19428-2959, 610-832-9500, *https://www.astm.org*.

(1) ASTM E119-20, Standard Test Methods for Fire Tests of Building Construction and Materials, approved May 1, 2020, for § 127.005.

(2) ASTM F1121-87 (Reapproved 2019), Standard Specification for International Shore Connections for Marine Fire Applications, approved December 1, 2019, for §§ 127.611 and 127.1511.

(d) Det Norske Veritas (DNV), Veritasveien 1, 1363 Høvik Norway, +47 6757 9900, *https://www.dnv.com*.

(1) DNVGL-RP-G105, Recommended Practice, Development and operation of liquefied natural gas bunkering facilities, October 2015 Edition, for § 127.008(d).

(2) [Reserved]

(e) International Electrotechnical Commission (IEC), IEC Central Office, 3 rue de Varembé, P.O. Box 131, CH 1211, Geneva 20, Switzerland, +41 22 919 02 11, *https://www.iec.ch*.

(1) IEC 60079-29-1, Explosive atmospheres—Part 29-1: Gas detectors—Performance requirements of detectors for flammable gases, Edition 2.0, July 2016, for § 127.1203(a).

(2) [Reserved]

(f) International Organization for Standardization (ISO), Chemin de Blandonnet 8, CP 401, 1214 Vernier, Geneva, Switzerland, +41 22 749 01 11, *https://www.iso.org*.

(1) ISO/TS 18683:2015(E), ("ISO/TS 18683"), Guidelines for systems and installations for supply of LNG as fuel to ships, First Edition, January 15, 2015, for § 127.008(d)(1).

(2) ISO 28460:2010(E), ("ISO 28460"), Petroleum and natural gas industries—Installation and equipment for liquefied natural gas—Ship-to-shore interface and port operations, First edition, December 15, 2010, for § 127.008(d)(2).

(g) National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, MA 02169-7471, 800-344-3555, *https://www.nfpa.org*.

(1) NFPA 10, Standard for Portable Fire Extinguishers, 2018 Edition, effective August 21, 2017, for §§ 127.603(a) and 127.1503.

(2) NFPA 30, Flammable and Combustible Liquids Code, 2018 Edition, effective September 6, 2017, for §§ 127.313(b) and 127.1313(b).

(3) NFPA 51B, Standard for Fire Prevention During Welding, Cutting, and Other Hot Work, 2019 Edition, effective July 15, 2018, for §§ 127.405(b) and 127.1405(b).

(4) NFPA 59A, Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG), 2019 Edition, effective November 25, 2018, for §§ 127.008(d), 127. 101, 127.201(b) and (c), 127.405(a) and (b), and 127.603(a).

(5) NFPA 70, National Electrical Code, 2020 Edition, effective August 25, 2019, for §§ 127.107(a) and (c), 127.201(c), and 127.1107.

[87 FR 5689, Feb. 2, 2022]

§ 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 current date.

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.

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, wildlife 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, and includes LNG fuel facilities.

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 ASTM E119-20 (incorporated by reference, see § 127.003).

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 bulk.

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 fuel facility means a waterfront facility that handles LNG for the sole purpose of providing LNG from shore-based structures to vessels for use as a marine fuel, and that does not transfer LNG to or receive LNG from vessels capable of carrying LNG in bulk as cargo.

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	T
Butadiene	F
Butanes	F
Butane and propane (mixtures)	F
Butylenes	F
Chlorine	T
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	T

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

Product	Hazard
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; 87 FR 5689, Feb. 2, 2022]

§ 127.007 Letter of intent and waterway suitability assessment for waterfront facilities handling LNG or LHG.

(a) An owner or operator intending to build a new facility handling LNG or LHG, or an owner or operator planning new construction to expand marine terminal operations in any facility handling LNG or LHG, where the construction or expansion will result in an increase in the size or frequency of LNG or LHG marine traffic on the waterway associated with a facility, must submit a Letter of Intent (LOI) to the Captain of the Port (COTP) of the zone in which the facility is or will be located. The LOI must meet the requirements in paragraph (c) of this section.

(1) The owner or operator of an LNG facility must submit the LOI to the COTP no later than the date that the owner or operator files a pre-filing request with the Federal Energy Regulatory Commission (FERC) under 18 CFR parts 153 and 157, but, in all cases, at least 1 year prior to the start of construction. The LOI must include the nation of registry for, and the nationality or citizenship of the officers and crew serving on board, vessels transporting LNG that are reasonably anticipated to be servicing the LNG facility.

(2) The owner or operator of an LHG facility must submit the LOI to the COTP no later than the date that the owner or operator files with the Federal or State agency having jurisdiction, but, in all cases, at least 1 year prior to the start of construction.

(b) An owner or operator intending to reactivate an inactive facility must submit an LOI that meets paragraph (c) of this section to the COTP of the zone in which the facility is located.

(1) The owner or operator of an LNG facility must submit the LOI to the COTP no later than the date the owner or operator files a pre-filing request with FERC under 18 CFR parts 153 and 157, but, in all cases, at least 1 year prior to the start of LNG transfer operations.

(2) The owner or operator of an LHG facility must submit the LOI to the COTP no later than the date the owner or operator files with the Federal or State agency having jurisdiction, but, in all cases, at least 1 year prior to the start of LHG transfer operations.

(c) Each LOI must contain—

(1) The name, address, and telephone number of the owner and operator;

(2) The name, address, and telephone number of the Federal, State, or local agency having jurisdiction for siting, construction, and operation;

(3) The name, address, and telephone number of the facility;

(4) The physical location of the facility;

(5) A description of the facility;

(6) The LNG or LHG vessels' characteristics and the frequency of LNG or LHG shipments to or from the facility; and

(7) Charts showing waterway channels and identifying commercial, industrial, environmentally sensitive, and residential areas in and adjacent to the waterway used by the LNG or LHG vessels en route to the facility, within at least 25 kilometers (15.5 miles) of the facility.

(d) The owner or operator who submits an LOI under paragraphs (a) or (b) of this section must notify the COTP in writing within 15 days of any of the following:

(1) There is any change in the information submitted under paragraphs (c)(1) through (c)(7) of this section; or

(2) No LNG or LHG transfer operations are scheduled within the next 12 months.

(e) An owner or operator intending to build a new LNG or LHG facility, or an owner or operator planning new construction to expand marine terminal operations in any facility handling LNG or LHG, where the construction or expansion will result in an increase in the size or frequency of LNG or LHG marine traffic on the waterway associated with a facility, must file or update as appropriate a waterway suitability assessment (WSA) with the COTP of the zone in which the facility is or will be located. The WSA must consist of a Preliminary WSA and a Follow-on WSA. A COTP may request additional information during review of the Preliminary WSA or Follow-on WSA.

(f) The Preliminary WSA must—

(1) Be submitted to the COTP with the LOI; and

(2) Provide an initial explanation of the following—

(i) Port characterization;

(ii) Characterization of the LNG or LHG facility and LNG or LHG tanker route;

(iii) Risk assessment for maritime safety and security;

(iv) Risk management strategies; and

(v) Resource needs for maritime safety, security, and response.

(g) The Follow-on WSA must—

(1) Be submitted to the COTP as follows:

(i) The owner or operator of an LNG facility must submit the Follow-on WSA to the COTP no later than the date the owner or operator files its application with FERC pursuant to 18 CFR parts 153 or 157, or if no application to FERC is required, at least 180 days before the owner or operator begins transferring LNG.

(ii) The owner or operator of an LHG facility must submit the Follow-on WSA to the COTP in all cases at least 180 days before the owner or operator begins transferring LHG.

(2) Contain a detailed analysis of the elements listed in §§ 127.007(f)(2), 127.009(d), and 127.009(e) of this part.

(h) Until the facility begins operation, owners or operators must:

(1) Annually review their WSAs and submit a report to the COTP as to whether changes are required. The deadline for the required annual report should coincide with the date of the COTP's Letter of Recommendation, which indicates review and validation of the Follow-on WSA has been completed.

(2) In the event that revisions to the WSA are needed, report to the COTP the details of the necessary revisions, along with a timeline for completion.

(3) Update the WSA if there are any changes in conditions, such as changes to the port environment, the LNG or LHG facility, or the tanker route, that would affect the suitability of the waterway for LNG or LHG traffic.

(4) Submit a final report to the COTP at least 30 days, but not more than 60 days, prior to the start of operations.

(i) An owner or operator intending to construct a new LNG fuel facility or modify any LNG fuel facility, or reactivate an inactive LNG fuel facility, may comply with § 127.008 in lieu of meeting the requirements in this section.

[USCG-2007-27022, 75 FR 29426, May 26, 2010, as amended by USCG-2019-0444, 87 FR 5689, Feb. 2, 2022]

§ 127.008 Letter of intent and operational risk assessment for LNG fuel facilities.

(a) An owner or operator intending to build a new LNG fuel facility, modify construction of any LNG fuel facility, or reactivate an inactive LNG fuel facility electing to complete an operational risk assessment (ORA) in lieu of a WSA as outlined in § 127.007, must submit an LOI and ORA to the COTP of the zone in which the LNG fuel facility is or will be located at least 1 year prior to the start of LNG transfer operations.

(b) Each LOI must contain the information in § 127.007(c)(1) through (c)(5).

(c) The owner or operator who submits an LOI under paragraph (a) of this section must notify the COTP in writing within 15 days of any of the following:

(1) There is any change in the information submitted under paragraph (b) of this section; or

(2) No LNG fuel transfer operations are scheduled within the next 12 months.

(d) The ORA required by paragraph (a) must:

(1) Be carried out in accordance with Chapter 7 of ISO/TS 18683 and Appendix D of DNVGL-RP-G105; or Chapter 19 of NFPA 59A (all incorporated by reference, see § 127.003); or other industry developed risk assessment method acceptable to the Office of Operating and Environmental Standards, Commandant (CG-OES); and

(2) Consider possible factors affecting the ship/shore interface and port operations described in Section 6 of ISO 28460 (incorporated by reference, see § 127.003).

[87 FR 5690, Feb. 2, 2022]

§ 127.009 Letter of recommendation.

(a) After the COTP receives the information and analyses required by § 127.007 or § 127.008, the COTP issues a Letter of Recommendation (LOR) as to the suitability of the waterway for LNG or LHG marine traffic or the operational safety and security of the LNG fuel facility to the Federal, State, or local government agencies having jurisdiction for siting, construction, and operation, and, at the same time, sends a copy to the owner or operator, based on the—

(1) Information submitted under § 127.007 or § 127.008;

(2) Density and character of marine traffic in the waterway;

(3) Locks, bridges, or other man-made obstructions in the waterway;

(4) Following factors adjacent to the facility such as—

(i) Depths of the water;

(ii) Tidal range;

(iii) Protection from high seas;

(iv) Natural hazards, including reefs, rocks, and sandbars;

(v) Underwater pipelines and cables;

(vi) Distance of berthed vessel from the channel and the width of the channel; and

(5) Any other issues affecting the safety and security of the waterway and considered relevant by the Captain of the Port.

(b) An LOR issued under this section is a recommendation from the COTP to the agency having jurisdiction as described in paragraph (a), and does not constitute agency action for the purposes of § 127.015 or the Administrative Procedure Act (5 U.S.C. 551 *et seq.*).

(c) The owner or operator, or a State, local, or Indian tribal government in the vicinity of the facility, may request reconsideration as set forth in § 127.010.

(d) Persons other than the owner or operator, or State, local, or Indian tribal government in the vicinity of the facility, may comment on the LOR by submitting comments and relevant information to the agency having jurisdiction, as described in paragraph (a), for that agency's consideration in its permitting process.

(e) Paragraphs (c) and (d) of this section apply to LORs issued after December 28, 2012. For LORs issued prior to that date, persons requesting reconsideration must follow the process set forth in § 127.015.

[USCG-2011-0227, 77 FR 70890, Nov. 28, 2012, as amended by USCG-2019-0444, 87 FR 5690, Feb. 2, 2022]

§ 127.010 Reconsideration of the Letter of Recommendation.

(a) A person requesting reconsideration pursuant to § 127.009(c) must submit a written request to the Captain of the Port (COTP) who issued the Letter of Recommendation (LOR), and send a copy of the request to the agency to which the LOR was issued. The request must explain why the COTP should reconsider his or her recommendation.

(b) In response to a request described in paragraph (a) of this section, the COTP will do one of the following—

(1) Send a written confirmation of the LOR to the agency to which the LOR was issued, with copies to the person making the request and the owner or operator; or

(2) Revise the LOR, and send the revised LOR to the agency to which the original LOR was issued, with copies to the person making the request and the owner or operator.

(c) A person whose request for reconsideration results in a confirmation as described in paragraph (b)(1) of this section, and who is not satisfied with that outcome, may request, in writing, the opinion of the District Commander of the district in which the LOR was issued.

(1) The request must explain why the person believes the District Commander should instruct the COTP to reconsider his or her recommendation.

(2) A person making a request under paragraph (c) of this section must send a copy of the request to the agency to which the LOR was issued.

(3) In response to the request described in this paragraph (c), the District Commander will do one of the following—

(i) Send a written confirmation of the LOR to the agency to which the LOR was issued, with copies to the person making the request, the owner or operator, and the COTP; or

(ii) Instruct the COTP to reconsider the LOR, and send written notification of that instruction to the agency to which the original LOR was issued, with copies to the person making the request and the owner or operator.

(d) The District Commander's written confirmation described in paragraph (c)(3)(i) of this section ends the reconsideration process with respect to that specific request for reconsideration. If the COTP issues an LOR pursuant to paragraph (b)(2) or (c)(3)(ii) of this section, persons described in § 127.009(c) may request reconsideration of that revised LOR using the process beginning in paragraph (a) of this section.

[USCG-2011-0227, 77 FR 70890, Nov. 28, 2012]

§ 127.011 Inspections of waterfront facilities.

The operator must 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; USCG-2019-0444, 87 FR 5690, Feb. 2, 2022]

§ 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 Prevention Policy, U.S. Coast Guard, (CG-5P), 2703 Martin Luther King Jr. Ave. SE, Stop 7509, Washington, DC 20593-7509; and

(2) Supply supporting documentation and evidence that the appellant wishes to have considered.

(d) The Assistant Commandant for Prevention Policy 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; USCG-2002-12471, 67 FR 41332, June 18, 2002; USCG-2010-0351, 75 FR 36283, June 25, 2010; USCG-2014-0410, 79 FR 38434, July 7, 2014; USCG-2020-0304, 85 FR 58279, Sept. 18, 2020; USCG-2019-0444, 87 FR 5690, Feb. 2, 2022]

§ 127.017 Alternatives.

(a) The COTP may allow alternative procedures, methods, or equipment standards, including alternatives to standards listed in § 127.003, 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.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by USCG-2019-0444, 87 FR 5690, Feb. 2, 2022]

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

(a) The owner or operator of an active facility must submit an Operations Manual and Emergency Manual in printed or electronic format to the COTP 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 facility must submit an Operations Manual and Emergency Manual in printed or electronic format 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) Operations Manuals and Emergency Manuals submitted after September 10, 2021 must include a date, revision date or other revision-specific identifying information.

(d) If the COTP finds that the Operations Manual meets § 127.305 or § 127.1305 and that the Emergency Manual meets § 127.307 or § 127.1307, the COTP will provide notice to the facility stating each manual has been examined by the Coast Guard. This notice will include the revision date of the manual or other revision-specific identifying information.

(e) If the COTP finds that the Operations Manual or the Emergency Manual does not meet this part, the COTP will notify the facility with an explanation of why it does not meet this part.

[USCG-2020-0315, 86 FR 43940, Aug. 11, 2021]

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 (incorporated by reference, see § 127.003):

(a) Chapter 5, Section 5.3.1.7;

(b) Chapter 6, Section 6.7;

(c) Chapter 10;

(d) Chapter 11, except Sections 11.9, and 11.10;

(e) Chapter 12;

(f) Chapter 15, except Sections 15.4 and 15.6; and

(g) Annex B.

[USCG-2019-0444, 87 FR 5690, Feb. 2, 2022]

§ 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 NFPA 70 (incorporated by reference, see § 127.003).

(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 (incorporated by reference, see § 127.003).

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by USCG-2019-0444, 87 FR 5690, Feb. 2, 2022]

§ 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 16.4 of NFPA 59A (incorporated by reference, see § 127.003).

(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(B)(1) of NFPA 70 (incorporated by reference, see § 127.003) and each area in which flammable or combustible material is stored; and

(2) Meet Section 16.4 of NFPA 59A (incorporated by reference, see § 127.003).

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by USCG-2019-0444, 87 FR 5690, Feb. 2, 2022]

§ 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 $^{1}/_{3}$-octave band sound pressure level at l 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]

OPERATIONS

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

(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 must certify in writing that the criteria in paragraph (a) of this section are met. The operator must 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; 87 FR 5691, Feb. 2, 2022]

§ 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 must ensure that—

(a) LNG transfer operations are not conducted unless the person in charge of transfer for the waterfront facility handling LNG has in the marine transfer area a readily available printed or electronic copy of the most recently examined Operations Manual and Emergency Manual. Electronic devices used to display the manuals must comply with applicable electrical safety standards in this part;

(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; USCG-2020-0315, 86 FR 43940, Aug. 11, 2021]

§ 127.311 Motor vehicles.

(a) The operator must 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.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by USCG-2019-0444, 87 FR 5690, Feb. 2, 2022]

§ 127.313 Bulk storage.

(a) The operator must 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 NFPA 30 (incorporated by reference, see § 127.003).

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 88-049, 60 FR 39796, Aug. 3, 1995; USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.315 Preliminary transfer inspection.

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

(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; USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 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 must 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 must give one signed copy of the Declaration of Inspection to the person in charge of transfer operations on the vessel, and must 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; USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.319 LNG transfer.

During LNG transfer operations, the following must be met:

(a) The operator of the waterfront facility handling LNG must 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 must—

(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.

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; USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.321 Release of LNG.

(a) The operator of the waterfront facility handling LNG must 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 must—

(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; USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

MAINTENANCE

§ 127.401 Maintenance: General.

The operator of the waterfront facility handling LNG must 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; USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.403 Inspections.

The operator must 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.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.405 Repairs.

The operator must 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 (incorporated by reference, see § 127.003); and

(2) Safety is not compromised; and

(b) Welding is done in accordance with NFPA 51B and Section 10.4.3 of NFPA 59A (both incorporated by reference, see § 127.003).

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 88-049, 60 FR 39796, Aug. 3, 1995; USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.407 Testing.

(a) The operator must 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.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.409 Records.

(a) The operator must 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.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

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.

§ 127.603 Portable fire extinguishers.

Each marine transfer area for LNG must have—

(a) Portable fire extinguishers that meet Section 16.6.1 of NFPA 59A and Chapter 6 of NFPA 10 (both incorporated by reference, see § 127.003); 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; USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 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 $1^{1}/_{2}$ 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 pre-aimed 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 F1121-87 (Reapproved 2019) (incorporated by reference, see § 127.003), a $2^{1}/_{2}$ inch fire hydrant, and $2^{1}/_{2}$ 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; USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.613 Smoking.

In the marine transfer area for LNG, the operator must 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; USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.615 Fires.

In the marine transfer area for LNG, the operator must 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; USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.617 Hotwork.

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

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

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 B31.3-2020 (incorporated by reference, see § 127.003).

(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 liquid-transfer 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 (incorporated by reference, see § 127.003).

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 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 ASME B16.5-2020 (incorporated by reference, see § 127.003); 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.

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 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 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 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.

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 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 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.

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.1107 Electrical systems.

Electrical equipment and wiring must be of the kind specified by, and must be installed in accordance with, NFPA 70 (incorporated by reference, see § 127.003).

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 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

(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) high.

(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 IEC 60079-29-1 (incorporated by reference, see § 127.003).

(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; USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 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 °C (221 °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 must 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; USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 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 must certify in writing that that person has met the requirements in paragraph (a) of this section. The operator must 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; USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.1302 Training.

(a) Each operator of a waterfront facility handling LHG must 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 must maintain, for each person trained, a record of all training provided under paragraphs (a) and (b) of this section. The operator must 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.

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 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.

The operator must ensure that—

(a) LHG transfer operations are not conducted unless the person in charge of transfer for the waterfront facility handling LHG has a printed or electronic copy of the most recently examined Operations Manual and Emergency Manual readily available in the marine transfer area. Electronic devices used to display the manuals must comply with applicable electrical safety standards in this part;

(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.

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2020-315, 86 FR 43940, Aug. 11, 2021]

§ 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 must 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.

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.1313 Storage of hazardous materials.

(a) Each operator of a waterfront facility handling LHG must 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 must ensure that flammable liquids not stored in bulk are stored in accordance with NFPA 30 (incorporated by reference, see § 127.003).

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.1315 Preliminary transfer inspection.

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

(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.

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.1317 Declaration of Inspection.

(a) Each person in charge of transfer for the facility must 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 must 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 must retain a signed copy of the Declaration at the facility for 30 days after the transfer.

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.1319 Transfer of LHG.

(a) The operator of a waterfront facility handling LHG must 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 must 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 must—

(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 must 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.

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.1321 Release of LHG.

(a) Each operator of a waterfront facility handling LHG must 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 must—

(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.

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.1325 Access to marine transfer area for LHG.

Each operator of a waterfront facility handling LHG must 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.

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

Maintenance

§ 127.1401 General.

Each operator of a waterfront facility handling LHG must 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.

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.1403 Inspections.

(a) Each operator of a waterfront facility handling LHG must conduct a visual inspection for defects of each pressure relief device not capable of being tested.

(b) The operator must conduct the inspection required by paragraph (a) of this section at least once each calendar year, with intervals between inspections not exceeding 15 months.

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 127.1405 Repairs.

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

(a) Equipment is repaired so that—

(1) The equipment continues to meet the applicable requirements in this subpart;

(2) Safety is not compromised; and

(b) Welding and cutting meet NFPA 51B (incorporated by reference, see § 127.003).

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5692, Feb. 2, 2022]

§ 127.1407 Tests.

(a) Each operator of a waterfront facility handling LHG must 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 must 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 must 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 must 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 must 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 must 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.

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5692, Feb. 2, 2022]

§ 127.1409 Records.

(a) Each operator of a waterfront facility handling LHG must 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 must keep this information on file for at least 24 months after the inspection, test, alteration, or major repair.

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5692, Feb. 2, 2022]

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 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; USCG-2019-0444, 87 FR 5691, Feb. 2, 2022]

§ 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 (incorporated by reference, see § 127.003).

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5692, Feb. 2, 2022]

§ 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 $2^{1}/_{2}$-inch supply line, one $2^{1}/_{2}$-inch fire hydrant, and enough $2^{1}/_{2}$-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 F1121-87 (Reapproved 2019) (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; USCG-2019-0444, 87 FR 5692, Feb. 2, 2022]

FIRE PROTECTION

§ 127.1601 Smoking.

Each operator of a waterfront facility handling LHG must 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.

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5692, Feb. 2, 2022]

§ 127.1603 Hotwork.

Each operator of a waterfront facility handling LHG must 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.

[CGD 88-049, 60 FR 39796, Aug. 3, 1995, as amended by USCG-2019-0444, 87 FR 5692, Feb. 2, 2022]

§ 127.1605 Other sources of ignition.

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

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

(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; USCG-2019-0444, 87 FR 5692, Feb. 2, 2022]