

§ 127.201

- (3) 7.6 centimeters (3 inches) high.

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

EQUIPMENT

§ 127.201 Sensing and alarm systems.

(a) Fixed sensors must have audio and visual alarms in the control room and audio alarms nearby.

(b) Fixed sensors that continuously monitor for LNG vapors must—

(1) Be in each enclosed area where vapor or gas may accumulate; and

(2) Meet Section 9-4 of NFPA 59A.

(c) Fixed sensors that continuously monitor for flame, heat, or products of combustion must—

(1) Be in each enclosed or covered Class I, Division 1, hazardous location defined in Section 500-5(a) of NFPA 70 and each area in which flammable or combustible material is stored; and

(2) Meet Section 9-4 of NFPA 59A.

§ 127.203 Portable gas detectors.

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

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

§ 127.205 Emergency shutdown.

Each transfer system must have an emergency shutdown system that—

(a) Can be activated manually; and

(b) Is activated automatically when the fixed sensors under §127.201(b) measure LNG concentrations exceeding 40% of the lower flammable limit.

§ 127.207 Warning alarms.

(a) The marine transfer area for LNG must have a rotating or flashing amber light with a minimum effective flash intensity, in the horizontal plane, of 5000 candelas. At least 50% of the required effective flash intensity must be maintained in all directions from 1.0 degree above to 1.0 degree below the horizontal plane.

(b) The marine transfer area for LNG must have a siren with a minimum $\frac{1}{3}$ -octave band sound pressure level at 1 meter of 125 decibels referenced to 0.0002 microbars. The siren must be lo-

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cated 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 shore-side 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 shall certify in writing that the criteria in paragraph (a) of this section are met. The operator shall maintain a copy of each current certification available for inspection at the waterfront facility handling LNG.

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

§ 127.303 Compliance with suspension order.

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

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

§ 127.305 Operations Manual.

Each *Operations Manual* must contain—