

§ 111.105-35

(iii) Within 5 feet (1.5m) of the boundaries of any ventilation outlet, access, or other opening to a Class I, Division 2 space.

(3) A location that is:

(i) Within 5 feet (1.5m) of a semi-enclosed Class I, Division 1 location indicated in paragraph (d)(2) of this section; or

(ii) Within 5 feet (1.5m) of a Class I, Division 1 space indicated in paragraph (d)(5).

(4) A semi-enclosed area that is below and contiguous with the drill floor to the boundaries of the derrick or to the extent of any enclosure which is liable to trap gases.

(5) A semi-enclosed derrick to the extent of its enclosure above the drill floor, or to a height of 10 feet (3m) above the drill floor, whichever is greater.

(6) Except as provided in paragraph (f) of this section, an enclosed space that has an opening into a Class I, Division 2 location.

(f) An enclosed space that has direct access to a Division 1 or Division 2 location is the same division as that location, except:

(1) An enclosed space that has direct access to a Division 1 location is not a hazardous location if:

(i) The access has self-closing gas-tight doors that form an air lock;

(ii) The ventilation causes greater pressure in the space than in the Division 1 location; and

(iii) Loss of ventilation overpressure is alarmed at a manned station;

(2) An enclosed space that has direct access to a Division 1 location can be considered as a Division 2 location if:

(i) The access has a self-closing, gas-tight door that opens into the space and that has no hold-back device;

(ii) Ventilation causes the air to flow with the door open from the space into the Division 1 location; and

(iii) Loss of ventilation is alarmed at a manned control station; and

(3) An enclosed space that has direct access to a Division 2 location is not a hazardous location if:

(i) The access has a self-closing, gas-tight door that opens into the space and that has no hold-back device;

46 CFR Ch. I (10-1-11 Edition)

(ii) Ventilation causes the air to flow with the door open from the space into the Division 2 location; and

(iii) Loss of ventilation actuates an alarm at a manned control station.

(g) Electrical equipment and devices installed in spaces made non-hazardous by the methods indicated in paragraph (f) of this section must be limited to essential equipment.

§ 111.105-35 Vessels carrying coal.

(a) The following are Class II, Division 1, (Zone 10 or Z) locations on a vessel that carries coal:

(1) The interior of each coal bin and hold.

(2) Each compartment that has a coal transfer point where coal is transferred, dropped, or dumped.

(3) Each open area within 3 meters (10 ft) of a coal transfer point where coal is dropped or dumped.

(b) Each space that has a coal conveyor on a vessel that carries coal is a Class II, Division 2, (Zone 11 or Y) space.

(c) A space that has a coal conveyor on a vessel that carries coal must have electrical equipment approved for Class II, Division 2, (Zone 11 or Y) hazardous locations, except watertight general emergency alarm signals.

[CGD 94-108, 61 FR 28285, June 4, 1996]

§ 111.105-37 Flammable anesthetics.

Each electric installation where a flammable anesthetic is used or stored must meet NFPA 99 (incorporated by reference, see 46 CFR 110.10-1).

[USCG-2003-16630, 73 FR 65200, Oct. 31, 2008]

§ 111.105-39 Additional requirements for vessels carrying vehicles with fuel in their tanks.

Each vessel that carries a vehicle with fuel in its tank must meet the requirements of ABS Steel Vessel Rules (incorporated by reference; see 46 CFR 110.10-1), section 5-10-4/3, except as follows:

(a) If the ventilation requirements of ABS Steel Vessel Rules section 5-10-4/3 are not met, all installed electrical equipment must be suitable for a Class I, Division 1; Zone 0; or Zone 1 hazardous location.

Coast Guard, DHS

§ 111.107-1

(b) If the vessel is fitted with an approved fixed gas detection system set at 25 percent the LEL, each item of the installed electrical equipment must meet the requirements for a Class I, Division 1; Class I, Division 2; Zone 0; Zone 1; or Zone 2 hazardous location.

[CGD 94-108, 61 FR 28285, June 4, 1996, as amended at 62 FR 23909, May 1, 1997; USCG-2003-16630, 73 FR 65200, Oct. 31, 2008]

§ 111.105-40 Additional requirements for RO/RO vessels.

(a) Each RO/RO vessel must meet ABS Steel Vessel Rules (incorporated by reference; see 46 CFR 110.10-1), section 4-8-4/27.3.2.

(b) Each item of installed electrical equipment must meet the requirements for a Class I, Division 1; Class I, Division 2; Zone 0; Zone 1; or Zone 2 hazardous location when installed 460 mm (18 inches) or more above the deck of closed cargo spaces. Electrical equipment installed within 460 mm (18 inches) of the deck must be suitable for either a Class I, Division 1; Zone 0; or Zone 1 hazardous location.

(c) Where the ventilation requirement of ABS Steel Vessel Rules section 4-8-4/27.3.2 is not met—

(1) All installed electrical equipment must be suitable for a Class I, Division 1; Zone 0; or Zone 1 hazardous location; or

(2) If fitted with an approved fixed gas detection system (set at 25 percent of the LEL), each item of installed electrical equipment must meet the requirements for either a Class I, Division 1; Class I, Division 2; Zone 0; Zone 1; or Zone 2 hazardous location.

[CGD 94-108, 61 FR 28285, June 4, 1996; 61 FR 33045, June 26, 1996, as amended at 62 FR 23909, May 1, 1997; USCG-2003-16630, 73 FR 65200, Oct. 31, 2008]

§ 111.105-41 Battery rooms.

Each electrical installation in a battery room must meet 46 CFR subpart 111.15 and IEEE 45-1998 (incorporated by reference; see 46 CFR 110.10-1).

[USCG-2003-16630, 73 FR 65201, Oct. 31, 2008]

§ 111.105-43 Paint stowage or mixing spaces.

A space for the stowage or mixing of paint must not have any electric equipment, except:

(a) Intrinsically safe electric equipment approved for a Class I, Division 1, Group D (Zone 0 or Zone 1) location;

(b) Explosionproof electric equipment approved for a Class I, Division 1, Group D (Zone 0 or Zone 1) location; or

(c) Through runs of marine shipboard cable.

[CGD 74-125A, 47 FR 15236, Apr. 8, 1982, as amended by CGD 94-108, 61 FR 28285, June 4, 1996; 62 FR 23909, May 1, 1997]

§ 111.105-45 Vessels carrying agricultural products.

(a) The following areas are Class II, Division 1, (Zone 10 or Z) locations on vessels carrying bulk agricultural products that may produce dust explosion hazards:

(1) The interior of each cargo hold or bin.

(2) Areas where cargo is transferred, dropped, or dumped and locations within 1 meter (3 feet) of the outer edge of these areas in all directions.

(b) The following areas are Class II, Division 2, (Zone 11 or Y) locations on vessels carrying bulk agricultural products that may produce dust explosion hazards:

(1) All areas within 2 meters (6.5 feet) of a Division 1 (Zone 10 or Z) location in all directions except when there is an intervening barrier, such as a bulkhead or deck.

NOTE TO § 111.105-45: Information on the dust explosion hazards associated with the carriage of agricultural products is contained in Coast Guard Navigation and Vessel Inspection Circular 9-84 (NVIC 9-84) "Electrical Installations in Agricultural Dust Locations."

[CGD 94-108, 61 FR 28285, June 4, 1996]

Subpart 111.107—Industrial Systems

§ 111.107-1 Industrial systems.

(a) For the purpose of this subpart, an industrial system is a system that—

(1) Is not a ship's service load, as defined in § 111.10-1;