be suitable for a Class I, Division 1; Zone 0; or Zone 1 hazardous location.

(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]

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

- (a) Each RO/RO vessel must meet ABS Rules for Building and Classing Steel Vessels, section 4/5E4.
- (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 Rules for Building and Classing Steel Vessels, section 4/5E4 is not met—
- (1) All installed electrical equipment must be suitable for a Class I, Division 1; Zone 0; or Zone 1 hazardous location;
- (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]

#### §111.105-41 Battery rooms.

Each electrical installation in a battery room must meet subpart 111.15 of this part and IEEE Std 45.

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

# §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—
- Is not a ship's service load, as defined in §111.10-1;
- (2) Is used only for the industrial function of the vessel:
- (3) Is not connected to the emergency power source; and
- (4) Does not have specific requirements addressed elsewhere in this subchapter.

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- (b) An industrial system that meets the applicable requirements of the NEC must meet only the following:
- (1) The switchgear standards in part 110, subpart 110.10, of this chapter.
- (2) Part 110, subpart 110.25, of this chapter—Plan Submittal.
- (3) Subpart 111.01 of this part—General.
- (4) Subpart 111.05 of this part-Equipment Ground, Ground Detection, and Grounded Systems.
- (5) Sections 111.12-1(b) and 111.12-1(c)—Prime movers.
- (6) Subpart 111.105 of this part—Hazardous Locations.
- (c) Cables that penetrate a watertight or fire boundary deck or bulkhead must-
- (1) Be installed in accordance with §111.60-5 and meet the flammability test requirements of IEEE Std 1202, section 18.13.5 of IEEE Std 45, or IEC 332-3, Category A; or
- (2) Be specialty cable installed in accordance with §111.60-2.

[CGD 94-108, 61 FR 28286, June 4, 1996, as amended at 62 FR 23910, May 1, 1997]

### PART 112—EMERGENCY LIGHTING AND POWER SYSTEMS

#### Subpart 112.01—Definitions of Emergency **Lighting and Power Systems**

Sec.

112.01-1 Purpose.

112.01-5 Manual emergency lighting and power system.

112.01-10 Automatic emergency lighting and power system.

112.01-15 Temporary emergency power source

112.01-20 Final emergency power source.

#### Subpart 112.05—General

112.05-1 Purpose

112.05-3 Main-emergency bus-tie.

112.05-5 Emergency power source.

### Subpart 112.15—Emergency Loads

112.15-1 Temporary emergency loads.

112.15-5 Final emergency loads. 112.15-10 Loads on systems without a temporary emergency power source.

#### Subpart 112.20—Emergency Systems Having a Temporary and a Final Emergency Power Source

112.20-1 General.

112.20-3 Normal source for emergency loads. 112.20-5 Failure of power from the normal source or final emergency power source.

112.20-10 Diesel or gas turbine driven emergency power source. 112.20–15 Transfer of emergency loads.

#### Subpart 112.25—Emergency Systems Having an Automatic Starting Diesel Engine or Gas Turbine Driven Emergency Power Source as the Sole Emergency **Power Source**

112.25-1General.

112.25-3 Normal source for emergency loads.

112.25-5 Failure of power from the normal source.

112.25-10 Transfer of emergency loads.

#### Subpart 112.30—Emergency Systems Having an Automatically Connected Storage Battery as the Sole Emergency **Power Source**

112.30-1 General.

112.30-3 Normal source of emergency loads.

112.30-5 Transfer of emergency loads.

112.30-10 Restoration of normal source potential

#### Subpart 112.35—Manually Controlled Emergency Systems Having a Storage Battery or a Diesel Engine or Gas Turbine Driven Generator as the Sole **Emergency Power Source**

112.35-1 General.

112.35-3 Normal source for emergency loads.

112.35-5 Manually started emergency systems.

112.35-7 Activating means.

#### Subpart 112.37—Temporary Emergency **Power Source**

112.37-1 General.

## Subpart 112.39—Battery Operated Lanterns

112.39-1 General.

112.39-3 Operation.

### Subpart 112.40—Alternating-Current **Temporary Source of Supply**

112.40-1 General requirements.

#### Subpart 112.43—Emergency Lighting Systems

112.43-1 Switches.

112.43-5 Controls on island type vessels.

112.43–7 Navigating bridge distribution panel.

112.43–9 Signaling lights. 112.43–11 Illumination for launching operations.