Coast Guard, DHS

§ 111.106–15 Ventilation of hazardous locations.

(a) The ventilation design principles must comply with Clauses 8.1.3, 8.2, and 8.3 of IEC 60092–502 (incorporated by reference, see § 110.10–1).

Note to § 111.106–15(a): The word “mechanical,” as used in this section, is interchangeable with the word “artificial” used in IEC 60092–502.

(b) A ventilation system must—

(1) Be positioned so as not to recycle vapors from ventilation discharges;

(2) Have its operational controls outside the ventilated space, if the system is mechanical; and

(3) Have a protective metal screen of not more than 13 mm (0.512 in.) square mesh on each ventilation intake and exhaust opening.

(c) The mechanical ventilation of enclosed flammable or combustible liquid cargo handling or cargo pump rooms must be sufficient to effect a minimum complete 30 air changes per hour based on the volume of the pump room and associated trunks up to the deck at which access from the weather is provided. The power ventilation system must be designed to remove vapors from the bottom of the space at points where concentrations of vapors may be expected.

(d) The following spaces must have a supply-type mechanical ventilation system capable of providing at least 8 air changes per hour:

(1) Each space that contains electric motors for cargo handling equipment.

(2) Each cargo control station.

§ 111.106–17 Piping: electrical bonding.

(a) Tanks or piping systems that are separated from the hull structure by thermal isolation must be electrically bonded to the hull structure by a method under paragraph (c) of this section.

(b) A pipe joint or a hose connection fitting that has a gasket must be electrically bonded by a method under paragraph (c) of this section that bonds—

(1) Both sides of the connection to the hull structure; or

(2) Each side of the connection to the other side.

(c) An electrical bond must be made by at least one of the following methods:

(1) A metal bonding strap attached by welding or bolting;

(2) Two or more bolts that give metal-to-metal contact between the bolts and the parts to be bonded; or

(3) Other metal-to-metal contact between adjacent parts under designed operating conditions.

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;

(2) Is used only for the industrial function of the vessel;