

CLASSIFIED LOCATIONS

§ 108.170 Definitions.

(a) Classified locations are those in which flammable hydrocarbon gas or vapors, resulting from the drilling operations, may be present in quantities sufficient to produce an explosive or ignitable mixture. Location of these areas affect the design of the units' machinery, electrical, and ventilation systems. (See Notes 1 and 2).

(b) For the purpose of this subpart "semi-enclosed location" means a location where natural conditions of ventilation are notably different from those on open decks due to the presence of structures such as roofs, windbreaks, or bulkheads.

NOTES: 1. Further requirements with respect to hazardous locations are contained in part 111, subpart 111.105, of this chapter.

2. For specific requirements for machinery and electrical installations on mobile offshore drilling units see Subchapters "F" and "J" of this chapter.

[CGD 73-251, 43 FR 56808, Dec. 4, 1978, as amended by CGD 94-108, 61 FR 28270, June 4, 1996]

§ 108.171 Class I, Division 1 locations.

The following are Class I, Division 1 locations:

(a) An enclosed space that contains any part of the mud circulating system that has an opening into the space and is between the well and final degassing discharge.

(b) An enclosed or semi-enclosed location that is below the drill floor, and contains a possible source of gas release.

(c) An enclosed space that is on the drill floor, and is not separated by a solid, gas-light floor from the spaces specified in paragraph (b) of this section.

(d) A space that would normally be considered a Division 2 location under § 108.173 but where combustible or flammable gases might accumulate.

(e) A location in the weather, or a semi-enclosed location, except as provided in paragraph (b) of this section that is within 1.5 m (5 ft.) of the boundary of any—

(1) Equipment or opening specified in paragraph (a) of this section;

(2) Ventilation outlet, access, or other opening to a Class I, Division 1 space; or

(3) Gas vent outlet.

(f) Except as provided in § 108.175, an enclosed space that has an opening into a Class I, Division 1 location.

§ 108.173 Class I, Division 2 locations.

The following are Class I, Division 2 locations:

(a) An enclosed space that has any open portion of the mud circulating system from the final degassing discharge to the mud suction connection at the mud pit.

(b) A location in the weather that is—

(1) Within the boundaries of the drilling derrick up to a height of 3 m (10 ft.) above the drill floor;

(2) Below the drill floor and within a radius of 3 m (10 ft.) of a possible source of gas release; or

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

(c) A location that is—

(1) Within 1.5 m (5 ft.) of a semi-enclosed Class I, Division 1 location indicated in § 108.171(b); or

(2) Within 1.5 m (5 ft.) of a Class I, Division 1 space indicated in § 108.171(e).

(d) 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 gasses.

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

(f) Except as provided in § 108.175 an enclosed space that has an opening into a Class I, Division 2 location.

§ 108.175 Contiguous locations.

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

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

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

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

(3) Loss of ventilation overpressure activates an alarm at a manned station;

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

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

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

(3) Loss of ventilation activates an alarm at a manned control station; and

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

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

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

(3) Loss of ventilation activates an alarm at a manned control station.

§ 108.177 Electrical equipment in classified locations.

Electrical equipment and devices installed in spaces made non-hazardous by the methods indicated in §108.175 must only be essential equipment.

VENTILATION

§ 108.181 Ventilation for enclosed spaces.

(a) Each enclosed space must be vented or ventilated.

(b) There must be a means to close each vent or ventilating system.

(c) Each fan in a ventilating system must have remote controls installed in accordance with part 111, subpart 111.103, of this chapter.

(d) There must be a means to close each doorway, ventilator, and annular space around each funnel or other opening to machinery, stowage, or working spaces. The means must be located outside the space.

(e) Each intake in a ventilating system must be located so as to prevent,

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as far as practicable, the intake of noxious fumes.

[CGD 73–251, 43 FR 56808, Dec. 4, 1978, as amended by CGD 94–108, 61 FR 28270, June 4, 1996]

§ 108.185 Ventilation for enclosed classified locations.

(a) The ventilation system for each enclosed classified location must be designed to maintain a pressure differential between the enclosed classified location and each non-classified location adjacent to the enclosed classified location, so as to prevent the discharge of ignitable gases into the non-classified adjacent locations.

(b) Each air intake must be outside of enclosed classified locations.

(c) Each unit must have alarms that are powered independently of the ventilation motor power and control circuitry and sound at a continuously manned station when—

(1) Gas is present in an enclosed classified location; or

(2) The ventilation system for the space is not working.

(d) Each ventilation system for enclosed classified locations must provide a complete change of air every five minutes.

[CGD 73–251, 43 FR 56808, Dec. 4, 1978, as amended by CGD 94–108, 61 FR 28270, June 4, 1996]

§ 108.187 Ventilation for brush type electric motors in classified spaces.

Ventilation for brush type electric motors in classified locations must meet N.F.P.A. 496–1974 “Standard for Purged and Pressurized Enclosures for Electrical Equipment in Hazardous Locations”, except audible and visual alarms may be used if shutting down the motors may cause unsafe conditions.

ACCOMMODATION SPACES

§ 108.193 Restrictions.

(a) There must be no direct communication between the accommodation spaces and any chainlocker, stowage, or machinery space, except through solid, close-fitted doors or hatches.

(b) No access, vent, or sounding tube from a fuel or oil tank may open into any accommodation space, except that