§ 116.405 General arrangement and outfitting.

(a) Fire hazards to be minimized. The general construction of the vessel must be such as to minimize fire hazards insofar as it is reasonable and practicable.

(b) Combustible materials to be limited. Limited amounts of combustible materials such as wiring insulation, pipe hanger linings, nonmetallic (plastic) pipe, and cable ties are permitted in concealed spaces except as otherwise prohibited by this subpart.

(c) Combustibles insulated from heated surfaces. Internal combustion engine exhausts, boiler and galley uptakes, and similar sources of ignition must be kept clear of and suitably insulated from combustible material.

(d) Separation of machinery and fuel tank spaces from accommodation spaces. Machinery and fuel tank spaces must be separated from accommodation spaces by boundaries that prevent the passage of vapors.

(e) Paint and flammable liquid lockers. Paint and flammable liquid lockers must be constructed of steel or equivalent material, or wholly lined with steel or equivalent material.

(f) Nonmetallic piping in concealed spaces. The use of nonmetallic (plastic) pipe within a concealed space in a control space, accommodation space, or service space is permitted in nonvital service only if the piping material has a flame spread rating of not more than 20 and a smoke developed rating of not more than 10 when tested in accordance with ASTM E 84 (incorporated by reference, see §114.600) or UL 723 by an independent laboratory.

(g) Vapor barriers. Vapor barriers must be provided where insulation of any type is used in spaces where flammable and combustible liquids or vapors are present, such as machinery spaces and paint lockers.