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To: Distribution

Subj: ACCEPTANCE OF REQUIREMENTS FOUND IN ABYC H-24, GASOLINE (PETROL) FUEL SYSTEMS, AS EQUIVALENT TO REQUIREMENTS FOUND IN 33 CFR 183.566

Ref. (a) 46 U.S.C. § 4305; Exemptions and Equivalents
(b) 33 CFR 183.566
(c) ABYC H-24, Gasoline (Petrol) Fuel Systems (2025)
(d) DHS Delegation #00170.1 Rev. 01.4

1. Purpose. This policy letter accepts, in accordance with conditions provided here, a substitution (applicable to certain pump-in-tank fuel systems) for the requirement, in ref (b), that a fuel pump (other than a pump used to transfer fuel between tanks) be on or within 12 inches of the engine it serves.

2. Background. The United States Coast Guard (USCG) has been delegated statutory authority under references (a) and (d) to accept a substitution for associated equipment, performance, or other safety standard for a recreational vessel if the substitution provides an equivalent level of safety. The Coast Guard administers this authority directly, without implementing regulations.

   a. The Fuel System Standard in 33 CFR 183 Subpart J requires manufacturers to design gasoline fuel systems in a manner that will minimize the probability of release of gasoline liquid or vapor. For example, section 183.558(a) requires each fuel hose used between the fuel pump and the carburetor be “USCG Type A1” hose and section 183.558(c) states that each hose must be secured by: (1) a swaged sleeve; (2) a sleeve and threaded insert; or (3) a hose clamp. Utilizing a pump-in-tank arrangement accepted by this policy meets the intent of these regulations.

   b. Historically, the USCG has issued exemptions under reference (a) for pump-in-tank fuel systems subject to regulations in 33 CFR 183 Subpart J, as fuel pumps in tanks are typically further than 12 inches from the engine. Exemptions have been issued for this arrangement for over 20 years with no known adverse effects. This arrangement was originally accepted in inboard ski boats, but it has become more popular with increasing horsepower and has proven itself in large outboard applications. Advantages of pump-in-tank installations include increased pump life due to a continuous, laminar supply of fuel to the pump and an environment that facilitates lubrication and heat dissipation.

Connections are also reduced significantly, greatly reducing the risk of fuel spillage from a failed fitting. The elimination of vacuum in the system also eliminates the risk of vapor lock.

c. Reference (c) addresses pump-in-tank in paragraph 24.17.9: *In Tank Fuel Pump Systems*, which is consistent with best practices.

3. Substitution. Pump-in-tank fuel systems compliant with reference (c), specifically paragraph 24.17.9 and its subclauses, are not required to comply with reference (b), as the requirements in reference (c) for pump-in-tank fuel systems provide an equivalent level of safety to reference (b). As pump-in-tank fuel systems typically have longer runs of pressurized hose, the fuel hose, fuel line connections, and fire test specified in reference (c) exceed the minimum requirements found in 33 CFR 183 Subpart J.

4. Contact Us. Requests for equivalency determinations to requirements found in 46 USC 43 or 33 CFR Subpart S or questions concerning recreational vessel regulatory compliance should be directed to COMDT (CG-BSX-23) Office of Auxiliary & Boating Safety at rbscompliance@uscg.mil.

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