

U. S. Department
of Transportation

United States
Coast Guard



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From: Commandant
To: Distribution

Subj: USE OF NONMETALLIC FLEXIBLE HOSE ON SUBCHAPTER T SMALL
PASSENGER VESSELS

1. The purpose of this policy letter is to clarify the regulations regarding the use of nonmetallic flexible hose, found in Title 46, Code of Federal Regulations (CFR) Subchapter T, §182.720. This policy letter is based on the intent of the regulations as well as a review of the applicable industry standards.
2. Since the publication of "New" Subchapter T in 1996, inconsistent application and interpretation of the regulations has existed in regards to the acceptability and use of nonmetallic flexible hose. These inconsistencies were caused by the reliance on residual local policies, which were based on "Old" T, and incorrect application of Subchapter F. The current regulations for small passenger vessels inspected under Subchapter T are found in §182.720 and use, as a basis, industry construction standards, SAE J1942 and SAE J1475, for flexible hose and fittings and provide additional requirements for the installation of the nonmetallic hose. Subchapter F is not referenced by these regulations and should not be used.
3. Hose properly marked in accordance with SAE J1942 should provide the information needed to determine whether or not the hose is acceptable for the applicable system. There may be instances where the hose part number will need to be verified against SAE J1942-1, "Qualified Hoses for Marine Applications," which lists all hose tested and verified as meeting SAE J1942. SAE J1942-1 provides a list of hose models by manufacturer, as well as each hose's maximum allowable working pressure, compatible end fittings, application (service code), and whether a fire sleeve is required.
4. The following are key points regarding the use of nonmetallic flexible hose:
 - (a) Hose meeting SAE J1942 may be used regardless of the vessel's hull material or vessel length.

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(b) Hose meeting SAE J1942 requirements may be used without length limitations. For fuel oil, lube oil, fluid power, and all other vital systems as defined by §182.710(a), nonmetallic flexible hose may not penetrate a watertight bulkhead.

(c) Hose meeting SAE J1942 may be used in all systems, including vital water systems.

(d) Care should be taken to ensure that the hose is appropriately classed for the system in which it is installed, e.g. fuel/lube oil (F), hydraulic (H), vital water (VW), etc.

(e) For all applications, hose meeting SAE J1942 must use hose end fittings that meet SAE J1475, "Hydraulic Hose Fittings for Marine Applications."

(f) Manufacturers may not mark a hose with all the standards for which a hose is qualified. If in doubt, a check of the manufacturer's part number against SAE J1942-1 should be made.

5. In certain cases, alternative standards and hose installations may be acceptable. For instance, flexible hose for use in fuel systems of smaller passenger vessels (not more than 65 feet carrying not more than 12 passengers) may alternatively meet the American Boat and Yacht Council (ABYC) Projects outlined in §182.130. Further, some systems may meet the requirements of §182.720(e)(v), which outlines where USCG Type A and B flexible hose may be used. The regulations for USCG Type A1, A2, B1 and B2 hose are covered in Title 33, CFR Subpart J for boat fuel systems.

6. For additional guidance on inspecting flexible hose assemblies, we encourage the use of SAE standard J1273, "Recommended Practices for Hydraulic Hose Assemblies." Although flexible hose may offer a less difficult means of completing a piping system, there are a number of ways to incorrectly install hose assemblies that may not be obvious to untrained personnel. For questions regarding SAE J1273, contact G-MSE-3. The J1942-1 list is available for sale to the public from the SAE by phone or website (www.sae.org). Marine Safety Offices can obtain the list from G-MSE-3 by contacting Mr. Thane Gilman at (202) 267-6048 or by fax (202) 267-4816.



J. G. Lantz

By Direction of the Commandant

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