

(4) Is used in transporting material found by the Secretary of Transportation to be hazardous under 49 U.S.C. 5103 and transported in a quantity requiring placarding under regulations prescribed by the Secretary under 49 CFR, subtitle B, chapter I, subchapter C.¹

Pursuant to § 393.45, brake tubing and hose on commercial motor vehicles must conform to the following SAE specifications: SAE Recommended Practice J1149 (Metallic Air Brake System Tubing and Pipe—July 1976); SAE Recommended Practice J844 (Nonmetallic Air Brake System Type B—October 1980); SAE Recommended Practice J1402 (Automotive Air Brake Hose and Hose Assemblies—June 1985); SAE Recommended Practice J1401 (Road Vehicle Hydraulic Brake Hose Assemblies for Use with Non Petroleum Base Hydraulic Fluid—June 1985); and SAE Recommended Practice J1403 (Vacuum Brake Hose—June 1985). Under section 393.46, tube fittings on commercial motor vehicles must conform to the requirements of either SAE Standard J512 (Automotive Tube Fittings—October 1980) or SAE J246 (Spherical and Flanged Sleeve (Compression) Tube Fittings—March 1981).

The Federal Highway Administration (“FHWA”), which was responsible for administering the FMCSRs prior to the formation of the Federal Motor Carrier Safety Administration, issued a Notice of Proposed Rulemaking on April 14, 1997 (62 FR 18170). The FHWA proposed amending part 393 of the FMCSRs to, among other things, remove obsolete and redundant regulations and resolve inconsistencies between part 393 and NHTSA’s FMVSS. The FHWA stated that because it has no statutory authority to regulate vehicle manufacturers or manufacturers of brake hose, tubing, or fittings, all such regulations should be included in NHTSA’s FMVSS rather than in the FMCSRs. The FHWA proposed adopting a requirement that commercial motor vehicles be maintained in compliance with FMVSS No. 106.

Accordingly, FHWA’s NPRM included a proposal to delete from §§ 393.45 and 393.46 all but one of the references to SAE specifications applicable to metallic brake tubing, nonmetallic brake tubing, air brake hose, hydraulic brake hose, vacuum brake hose, air brake tube fittings, and

spherical and flanged sleeve tube fittings. In place of the SAE specifications, FHWA proposed that § 393.45 state that all brake hose and tubing, brake hose assemblies, and fittings must meet the applicable requirements of FMVSS No. 106. The proposal included retaining one reference to SAE J844 in § 393.45 for coiled nylon brake hose and hose assemblies. Presently, FMVSS No. 106 excludes coiled nylon brake hose/assemblies that comply with FMCSR § 393.45 from certain requirements, namely S7.3.6 (length change), S7.3.10 (tensile strength), and S7.3.11 (tensile strength of an assembly after immersion in water).

FHWA’s NPRM aroused concerns. Several brake hose manufacturers and one engineering consultant submitted comments objecting to the proposed deletion of all but one reference to the SAE specifications from §§ 393.45 and 393.46 of the FMCSRs. In addition, a letter signed by 44 Members of Congress was sent to the Secretary of Transportation on November 3, 1997, expressing their concern over FHWA’s proposal to repeal its safety standards for commercial motor vehicle brake hose, brake tubing, and fittings.

In response to these concerns, the Department of Transportation held a public meeting on March 24, 1998. In attendance were representatives from FHWA and NHTSA, several brake hose/tubing/fitting manufacturers, a truck manufacturer, a truck manufacturers association, an explosives manufacturer, a truck users association, and United States Congressman Thomas Sawyer (D-Ohio).

At the public meeting, representatives from NHTSA and FHWA said that they favored consolidating all requirements for brake hose, brake tubing, and fittings in FMVSS No. 106, instead of maintaining separate requirements under the jurisdiction of two different agencies. They explained that consolidation of the requirements would, among other things, make them more enforceable. Some of the brake component manufacturers stated their opposition to deleting the SAE specifications for their products. FHWA and NHTSA indicated that anyone opposed to FHWA’s proposal was welcome to file a petition for rulemaking requesting that the SAE specifications proposed for deletion for the FMCSRs be incorporated into FMVSS No. 106.

II. Joint Petition for Rulemaking

On October 30, 1998, Elf Atochem North America, Inc., Mark IV Industrial/Dayco Eastman, and Parker Hannifin

Corporation jointly submitted a petition for rulemaking asking the agency to incorporate into FMVSS No. 106 the SAE specifications for brake hose, brake tubing, and fittings that FHWA proposed deleting from §§ 393.45 and 393.46 of the FMCSRs. The petition requested that the application of these SAE specifications be limited to hose, tubing, and fittings used on trucks, truck-trailer combinations, and buses with either a GVWR greater than 10,000 lbs. or which are designed to transport 16 or more people, including the driver. In addition, the petitioners requested that the current versions of the SAE specifications be adopted instead of the older versions cited in the FMCSRs.

III. NHTSA’s Response to the Joint Petition

NHTSA has decided to grant the joint petition for rulemaking. The agency agrees with the petitioners that there is a safety need to transfer the brake hose, tubing, and fitting requirements currently contained in §§ 393.45 and 393.46 of the FMCSRs to FMVSS No. 106, before those requirements are deleted. NHTSA tentatively concludes that to ensure the continued safety of commercial motor vehicle braking systems, the substantive specifications of the SAE Recommended Practices should be incorporated into FMVSS No. 106, with a few exceptions as noted. This would involve, among other changes, establishing a new category in the standard for plastic air brake tubing, end fittings, and tubing assemblies.

NHTSA’s decision to grant the joint petition is also based on the fact that FMVSS No. 106 has not been substantially updated in many years. Revisions over the past 20 years have primarily addressed labeling issues, inclusion of metric-sized brake hoses, updating test fluids to match advances in industry, and minor regulatory revisions to individual test conditions such as the whip test and the adhesion test. The agency notes that most of the substantive requirements currently in Standard 106, other than the labeling requirements, were originally based on SAE standards and American Society for Testing and Materials (ASTM) standards referenced therein. While the SAE and ASTM standards have been modified over time to keep pace with technological developments in the industry, the substantive requirements of FMVSS No. 106 have remained relatively unchanged. Therefore, NHTSA’s proposed changes to Standard No. 106 would take into account the substantial technological developments that have occurred and align the

¹ The FMCSRs contain two different definitions of “commercial motor vehicle”: one in § 393.5 and another in section 382.107. The latter definition is narrower than the former. We note that all references throughout this document to “commercial motor vehicle” are to the broader definition found in section 393.5.