

required controls for internal shut-off valves for the discharge system to be installed at remote locations on all newly constructed and currently authorized MC 330, MC 331, and MC 338 specification cargo tanks. Cargo tanks currently in hazardous materials service must be retrofitted with on-truck remote shut-off controls over a three-year period.

- Consistent with Recommendation H-93-94, the April 18 final rule required all manually activated on-truck remote shutoff devices for closure of the internal valve to be marked "Emergency Shutoff."

- Consistent with Recommendation H-95-14, the April 18 final rule required thickness testing of ring stiffeners and appurtenances on cargo tanks that are constructed of mild steel, high-strength, low-alloy steel, or aluminum, when the ring stiffeners and appurtenances are installed in a manner that precludes an external visual inspection.

The April 18 final rule effective date is October 30, 2003; voluntary compliance is authorized as of May 18, 2003.

II. Appeals

Six organizations submitted appeals to the April 18 final rule in accordance with 49 CFR Part 106: the Compressed Gas Association, Inc. (CGA); the National Propane Gas Association (NPGA); Container Technology, Inc. (Container Technology); the National Tank Truck Carriers, Inc. (NTTC); Baltimore Cargo Tank Service, Inc. (Baltimore Tank); and Fisher Controls (Fisher). The appellants express concern about several revisions included in the final rule; two appellants ask for an extension to the effective date of the final rule. The issues raised by the appellants are discussed in detail below.

A. Appeals Granted

Section 178.320—Definitions. The April 18 final rule revised the definition of "cargo tank." NTTC requests that we consider further modifying the definition to indicate that a cargo tank may be used for the transportation of solids and semi-solids, in addition to liquids or gases. NTTC explains that, in today's operating environment, cargo tanks are used routinely to transport materials that may be tendered as solids (such as powders) and slurries (semi-solids). Many such loads, especially environmentally sensitive materials, are subject to the HMR. We agree; in this final rule we are modifying the definition of "cargo tank" to include solids and semi-solids among the

materials for which a cargo tank may be used for transportation.

The April 18 final rule adopted definitions for "sacrificial device" and "shear section" that were developed for the DOT 400 series cargo tanks and made the definitions generally applicable to all cargo tanks. NPGA objects to the new definitions, stating that because of "substantial" differences in design, construction, use and pressure conditions, the definitions for the DOT 400 series cargo tanks are not directly transferable to MC 331 cargo tanks. We agree that the issue requires further analysis and that, until such analysis is complete, the definitions for "sacrificial device" and "shear section" originally adopted for the DOT 400 series cargo tanks should not be applied to MC 331 cargo tanks. Therefore, in this final rule, we are deleting the definitions from § 178.320, which establishes requirements applicable to all DOT specification cargo tank motor vehicles, and placing them in § 178.345-1(c), which sets forth general requirements applicable to DOT 406, DOT 407, and DOT 412 cargo tank motor vehicles. We will consider addressing this issue in a subsequent rulemaking.

The April 18 final rule adopted a definition for "shear section" to mean a sacrificial device fabricated to reduce the wall thickness of the adjacent piping or valve material by at least 30 percent. Based on this definition, the April 18 final rule revised § 178.337-10(f)(2) to require a shear section to break at no more than 70 percent of the load that would be required to cause the failure of the protected lading retention device, part, or wall. NPGA suggests that this requirement would necessitate a complete and costly redesign of valves used as sacrificial devices. Therefore, in this final rule we are revising § 178.337-10(f)(2) to remove the requirement adopted in the April 18 final rule for a shear section to break at no more than 70 percent of the load that would be required to cause the failure of the protected lading retention device, part, or wall.

Section 178.320—Design certification. The April 18 final rule revised § 178.320(b)(1) to require accident damage protection devices to be certified by a Design Certifying Engineer (DCE). NPGA, Fisher, and Baltimore Tank note that, since the term "accident damage protection devices" is not defined, it could be misinterpreted to include component valves, particularly if the component valve includes a shear section. NPGA and Fisher request that we define "accident damage protection devices." We agree. In this final rule, we

are adding a sentence to § 178.320(b)(1) to clarify that the term "accident damage protection devices," means rear-end protection, overturn protection, and piping protection devices.

Baltimore Tank suggests that, as drafted, § 178.320(b)(1) could be interpreted to require a DCE certification of an accident damage protection device design on its own—that is, independent of the cargo tank motor vehicle to which it is attached. This was not our intent. In this final rule, we are revising the section as suggested by Baltimore Tank.

Section 178.337-9—Use of stainless steel for internal cargo tank components. The April 18 final rule adopted a provision in § 178.337-9(b)(2) to prohibit the use of stainless steel for internal components of a cargo tank, such as shutoff discs and springs. NPGA and Container Technology appealed this provision, suggesting that it is overly restrictive and that stainless steel should be permitted for internal components where it is not incompatible with the lading. We agree and are making the appropriate revision in this final rule.

CGA also appealed the April 18 final rule provision in § 178.337-9(b)(2). CGA's concern is that the final rule requires malleable steel, stainless steel, or ductile iron to be used to construct primary valves and fittings used in liquid filling or vapor equalization. CGA points out that malleable metal, including brass, is safely used for fittings on cargo tanks used to transport carbon dioxide. We agree; this revision in § 178.337-9(b)(2) was inadvertent. In this final rule, we are revising this provision to require malleable metal, stainless steel, or ductile iron to be used to construct primary valves and fittings.

In addition, in this final rule we are revising § 178.337-9(b)(2) to make an editorial change suggested by NPGA. The phrase "except for sacrificial devices" should be part of the second sentence in this section, not the third sentence.

Section 178.337-10—Rear end protection. The April 18 final rule adopted rear end protection requirements originally developed for DOT 400 series cargo tanks as an option for MC 331 cargo tanks. In paragraph (c)(1) of § 178.337-10, the final rule requires rear end bumper dimensions to meet the requirements in 49 CFR 393.86 and extend vertically to a height that is adequate to protect all valves and fittings located at the rear of the cargo tank. NPGA notes that certain MC 331 cargo tanks used to transport propane have a pressure gauge in a fitting located at the center of the rear cargo tank head