

maximum loading and unloading pressure marking on the specification plate. We included the proposal in the NPRM. TTMA noted that the volume change of liquids transported in DOT 406, DOT 407, and DOT 412 cargo tanks is small and that the maximum loading and unloading rate is calculated in the design of the cargo tank and identified on the specification plate. We agree that the maximum loading and unloading pressure marking is unnecessary because the maximum loading/unloading pressure is reflected in the MAWP. However, in no situation can the actual pressure in the tank exceed the MAWP. This final rule adopts the provision as proposed.

In addition, in § 180.405(k), we proposed to require owners of MC 300, MC 301, MC 302, MC 303, MC 305, MC 306 and MC 312 cargo tanks that have a pressure relief system set at 3 psig to mark or remark the cargo tank with an MAWP or design pressure of not less than 3 psig. NATC says that its field staff found approximately 11% of the MC 306 cargo tanks inspected at one location had no design pressure marked on the specification plates. This revision to the marking requirements will help reduce the number of cargo tanks without a marked design pressure.

#### *E. Leak Testing Using EPA Method 27*

In the NPRM, we proposed to clarify the parameters in § 178.346–5, 180.407(h)(2), and 180.415(b)(3) for testing and marking cargo tanks used to transport petroleum distillate fuels and equipped with vapor recovery equipment. Such cargo tanks may be tested in accordance with the Environmental Protection Agency (EPA) “Method 27—Determination of Vapor Tightness of Gasoline Delivery Tank Using Pressure-Vacuum Test” as set forth in Appendix A to 40 CFR part 60. This annual certification test includes both the Method 27 test for vapor tightness of a cargo tank and a pressure test of the tank’s internal vapor valve. The revision proposed in the NPRM specified that cargo tanks equipped with vapor collection equipment that are used to transport petroleum distillate fuels may be tested in accordance with 40 CFR 63.425(e) instead of the annual leakage test required under § 180.407 of the HMR. In addition, we proposed that, if the EPA annual certification test in 40 CFR 63.425(e) is used to satisfy the annual leak test requirement, the Method 27 test must be conducted using air. Performing the test using liquid, an alternative allowed by EPA, may mask leakage below the liquid level at the pressure level specified for the test. The EPA Method 27 air test will more

accurately detect small leaks in a cargo tank. Therefore, we proposed to prohibit use of alternative procedures in section 6 of Method 27 that allow the use of water.

We proposed a special marking to designate cargo tanks that have been tested in conformance with EPA’s annual certification test for cargo tanks equipped with vapor recovery equipment and used to transport petroleum distillate fuels. The proposed marking is “K–EPA27.” The marking would replace the “K” marking on a cargo tank if the EPA vapor tightness test methods and procedures as set forth in 40 CFR 63.425(e) are used in place of the leak test. If a cargo tank is tested using both the leak test specified in the HMR and the vapor tightness tests specified in the EPA regulations, it would be marked with both “K” and “K–EPA27.” This proposal would establish a national, uniform marking requirement for cargo tanks tested for vapor tightness in accordance with EPA regulations instead of, or in addition to, the leak test procedures specified in the HMR. This marking would be applied to cargo tanks that are tested for vapor tightness under EPA procedures beginning one year after the effective date of the final rule.

Several commenters addressed this proposal. Baltimore Cargo Tank asks why the test would only be permitted for petroleum products. The Method 27 test is performed at 0.6 psig for gasoline cargo tanks. The test pressure is not sufficient to detect leaks on a cargo tank used to transport other types of hazardous materials. We will consider allowing the EPA Method 27 test for other cargo tank ladings that are subject to EPA vapor recovery system requirements in a future rulemaking.

In addition, several commenters question the need for a special marking. The marking requirement will allow an inspector to know the tank was tested using the EPA Method 27 test and also standardize the marking for tanks undergoing this test throughout the United States. RSPA’s marking requirement will preempt state marking requirements for cargo tanks tested with the EPA Method 27 test, eliminating possible confusion by enforcement personnel attempting to verify that a cargo tank has met the HMR leak test requirements.

A representative of Tank Truck Service suggests we omit the provision since the EPA requirements are less stringent than the DOT leakage test. The HMR already permit the test. This final rule clarifies that the test may be used only for petroleum fuel service. Further, this final rule specifies that the test may

not be performed using liquid, but must be performed with air. This provision strengthens the EPA Method 27 test as an alternative to the leakage test. This final rule adopts the EPA Method 27 test provisions as proposed in the NPRM.

#### *F. Weld Joints on DOT 407 Cargo Tanks*

In a petition (P–1333), TTMA requested that we adopt a weld joint efficiency of 0.85 for head seams in bulkheads on DOT 407 cargo tanks. Based on a review of the TTMA petition and additional information, we proposed that the strength of a weld seam in a bulkhead without radiographic examination of the weld must be 0.85 of the strength of the bulkhead. The welded seam must be a full penetration butt weld, no more than one seam may be used per bulkhead, and the welded seam must be completed before forming the dish radius and knuckle radius.

In its petition, TTMA also requested that we permit spot radiographic examination of weld joints every six months as an alternative to the periodic test. We do not agree with TTMA on this issue. Instead, we proposed that two test specimens of the same material and thickness and joined by the same welding procedures as those to be used in manufacturing the bulkhead must be tested to failure in tension. The ratio of the actual tensile stress of the weld joint to the actual tensile strength of the adjacent material of both samples must be greater than 0.85. Under the proposal, the test specimens may represent all the tanks that are manufactured in the same facility within six months after the tests are completed.

In its comments to the NPRM, TTMA agrees with the provisional 85% weld joint efficiency for DOT 407 heads with butt-welded seams. However, TTMA suggests that we include the requirements of Part UW–12 of the ASME Code to the list of excepted requirements in § 178.347–1(d)(8). We agree. In this final rule, we are adding Part UW–12 of the ASME Code to the list of excepted requirements.

#### **IV. Revisions Applicable to MC 331 and MC 338 Cargo Tanks**

The NPRM proposed several revisions to the HMR specifications applicable to MC 331 and MC 338 cargo tanks. The proposals include: (1) Revisions to make the specifications consistent with the DOT 400-series cargo tank specification requirements; (2) retrofit requirements for cargo tanks not currently equipped with remote shutoff devices; (3) a new requirement for thermal activation devices on MC 338 CTMVs; (4) revisions