DEPARTMENT OF TRANSPORTATION

Research and Special Programs Administration

49 CFR Parts 171, 172, 173 and 178

[Docket No. HM-181E; Amdt. Nos. 171-134, 172-142, 173-243, 178-108]

RIN 2137-AC23

Intermediate Bulk Containers for Hazardous Materials

AGENCY: Research and Special Programs Administration (RSPA), DOT.

ACTION: Final rule; revisions and response to petitions for reconsideration.

SUMMARY: This amendment makes revisions to a final rule published in the Federal Register under Docket HM-181E (59 FR 38040, July 26, 1994) in response to a number of petitions for reconsideration. This document also clarifies and makes corrections to the final rule. That final rule established requirements for the construction, maintenance and use of intermediate bulk containers (IBCs) for the transportation of hazardous materials. These changes respond to petitions for reconsideration regarding IBC authorizations, design, construction and use, and align requirements for IBCs with revisions in the 8th edition of the U.N. Recommendations on the Transport of Dangerous Goods and the 27th revision of the International Maritime Organization's International Maritime Dangerous Goods (IMDG) Code.

DATES: This amendment is effective on October 1, 1995. However, immediate compliance with the regulations as amended herein is authorized.

Incorporation by reference: The incorporation by reference listed in this final rule is approved by the Director of the Office of the Federal Register as of October 1, 1995.

FOR FURTHER INFORMATION CONTACT: John Potter, Office of Hazardous Materials Standards, (202) 366–8553 or William Gramer, Office of Hazardous Materials Technology, (202) 366–4545, RSPA, U.S. Department of Transportation, 400 Seventh Street SW., Washington DC 20590–0001.

SUPPLEMENTARY INFORMATION: On July 26, 1994, the Research and Special Programs Administration published a final rule under Docket HM–181E (59 FR 38040) that revised the Hazardous Materials Regulations (HMR; 49 CFR Parts 171–180) by incorporating requirements for the construction, maintenance and use of IBCs for the

transportation of hazardous materials. In response to 29 petitions for reconsideration, this document revises, clarifies and makes corrections to the final rule. Petitioners recommended revisions to: (1) The policy stated in the preamble at 59 FR 38040 addressing exemption packagings affected by this final rule; (2) the special provisions for IBCs contained in § 172.102; (3) the provision for the manufacture and use of DOT specification 56 and 57 portable tanks provided in § 173.32(d); (4) operational requirements for reuse of IBCs in § 173.35(b); (5) generic authorizations for use of IBCs in §§ 173.240, 173.241, 173.242, and 173.243; (6) standards for rigid plastic and composite IBCs in §§ 178.706 and 178.707; (7) responsibility for the performance of UN-certified IBCs in § 178.801(b); (8) testing and certification of IBCs in § 178.803; and (9) application of the IBC vibration test in § 178.819.

Several petitions relating to IBC commodity authorizations, such as hydrogen peroxide aqueous solutions, were addressed in a final rule published under Docket HM–215A (59 FR 67390–67522, December 29, 1994).

Petitions Granted

In response to petitions, authorizations for use of IBCs for a number of materials are added to the § 172.101 Hazardous Materials Table. Some of these changes are consistent with many of the latest revised IBC authorizations in the International Maritime Organization's International Maritime Dangerous Goods (IMDG) Code. Others reflect prior safe hazardous materials shipping experience in DOT exemption bulk packagings. For example, IBC authorizations are revised for a number of Division 4.3 DANGEROUS WHEN WET materials in Packing Groups II and III, which were previously forbidden for transportation in IBCs. Many of these materials now are permitted in all siftproof and water-resistant IBCs. In addition, certain Division 4.3 Packing Group I solid materials are authorized for transportation in IBCs, consistent with the IMDG Code. Prohibitions against use of IBCs are removed from ''Cyclohexylamine'' and ''Hafnium powder, dry." A wider range of IBCs is permitted for "Toxic, liquids, organic, n.o.s.," and "Toxic liquid, inorganic, n.o.s.," Packing Group II.

One petitioner asked RSPA to add filling limit provisions to the IBC operational requirements in § 173.35 similar to those provided in § 173.24a(b) for non-bulk packagings. For example, the gross mass (or net mass in the case of flexible IBCs) marked on the IBC can

be exceeded when the IBC is tested and certified for a Packing Group II liquid and filled with a Packing Group III solid; or an IBC is tested and certified for a Packing Group I solid and filled with a Packing Group II or Packing Group III solid. RSPA concurs and, accordingly, is adding a paragraph (l) to provide for this flexibility in IBC use. RSPA notes that the amount by which the gross mass of IBCs can be exceeded in these cases is based on the ratios between drop heights specified for Packing Groups I and III (2.25) and Packing Groups I and II, and II and III (1.5). IBCs certified for liquids may also be used for solids.

In response to a petition, a maximum net mass capacity standard of not less than 400 kilograms (882 pounds) is added in § 178.700(c)(1) for consistency with similar standards for non-bulk packagings in subpart L. To reduce the need for IBC retesting, RSPA grants a petition from the Rigid Intermediate Bulk Container Association by adding Note 6 to the table of IBC tests in § 178.803 to permit any desired sequencing of the vibration test for dualmarked, exemption IBCs and non-DOT specification portable tanks intended for export that were tested before October 1, 1994.

Several petitioners requested removal of the word "rotate" from the vibration test method prescribed for IBCs in § 178.819(b)(2). They contend that allowing an IBC to rotate would involve a "major redesign of all known testing platforms and restraining members.' Section 178.608(b)(2) requires that nonbulk packagings be left free to rotate, a standard that may be inappropriate for IBCs which are unlikely to experience the same vibration stresses in transportation. RSPA further acknowledges that the vibration test requirement for DOT 56 and 57 portable tanks in §§ 178.252-3 and 178.253-5 allows only vertical motion. Therefore, the word "rotate" is removed from the test method stated in § 178.819(b)(2). However, RSPA will not restrict rotation if it is included in an established vibration test protocol.

One petitioner stated that general requirements in § 178.801(b) for assuring that each IBC is capable of meeting Part 178 performance standards are inconsistent with other provisions in the HMR. As written, the petitioner said, paragraph (b) makes the shipper "responsible for every aspect of [IBC] fabrication and testing, including those aspects that were not performed by the shipper." The petitioner suggested that paragraph (b) conform with final rules published under HM–215A clarifying §§ 173.22, 178.2 and 178.601(b)