



DEPARTMENT OF TRANSPORTATION
MATERIALS TRANSPORTATION BUREAU
WASHINGTON, D.C. 20590

60097

49 CFR Parts 172, 173, 174, 177, 178

[Docket No. HM-139B; Amdt. Nos. 172-55, 173-133, 174-35, 177-46, 178-58]

Conversion of Individual Exemptions to Regulations of General Applicability

AGENCY: Materials Transportation Bureau, Research and Special Programs Administration, Department of Transportation (DOT).

ACTION: Final Rule.

SUMMARY: This action is being taken to incorporate into the Department's Hazardous Materials Regulations a number of changes based on the data and analyses supplied in selected exemption applications or from existing exemptions. The need for this action has been created by the public demand to make available new packaging and shipping alternatives that have proven themselves safe under the Department's exemption program. The intended effect of these amendments is to provide wider access to the benefits of transportation innovations recognized and shown to be effective and safe.

EFFECTIVE DATE: October 18, 1979, except that the effective date of § 173.3(c)(3) is February 15, 1980.

FOR FURTHER INFORMATION CONTACT: Darrell L. Raines, Office of Hazardous Materials Regulations, 400 7th Street, S.W., Washington, D.C. 20590. [202-426-2075].

SUPPLEMENTARY INFORMATION: On June 25, 1979, the Materials Transportation Bureau (MTB) published a Notice of Proposed Rulemaking, Docket HM-139B; Notice No. 79-10 [44 FR 37017] which proposed these amendments. The background and the basis for incorporating these exemptions into the regulations were discussed in that notice. Interested persons were invited to give their views prior to the closing date of July 25, 1979.

Primary drafters of this document are Darrell L. Raines, Office of Hazardous Materials Regulation, Exemption and Regulations Termination Branch, and Evan C. Braude, of the Office of the Chief Counsel, Research and Special Programs Administration.

The Bureau received seven comments

on Notice 79-10, all of which were favorable to the proposed changes except for minor modifications.

Although seven comments were received, only three subjects were involved and they were in reference to (1) recovery drums (now identified as salvage drums); (2) bottom outlets on DOT Specification MC 310 and MC 311 cargo tanks, and (3) calcium carbide, [DOT-15 8052].

The major concern with the salvage drum had to do with (a) shipping paper requirements, (b) re-use, and (c) marking. Two commenters pointed out the inconsistency for shipping papers between the rail and truck mode. The Bureau agrees that the need for shipping papers is important regardless of the mode of transportation. Therefore, § 174.43(b) has been revised by deleting that portion in the notice which read: "except that shipping papers are not required."

Based on the comments received, there appears to be some misunderstanding concerning the authorized reuse of salvage drums. The purpose of the rule is to provide an appropriate means to mitigate problems resulting from the discovery of damaged or leaking packages during transportation. It was not intended that they be used to ship damaged or leaking packages discovered before transportation begins. However, one commenter stated: "Another restricted situation we envision is the use of the 'Recovery Drum' for transportation of contaminated soil (earth) from the scene of a hazardous material incident to an authorized disposal site." The MTB agrees that provisions should be made for such circumstances occurring during transportation and has revised paragraph (c) of Section 173.3 accordingly.

An exception to the reconditioning requirements of § 173.28(h) has been added to § 173.3(c)(6). Any authorized removable head drum used as a salvage drum may be reused provided it has been adequately cleaned and inspected.

One commenter requested that a time period of at least 60 days be allowed from the effective date of these amendments to permit implementation of the new marking requirements for the

salvage drum. In view of the change to "Salvage Drum" a time period of 120 days has been granted.

The term "Recovery Drum" has been replaced with the term "Salvage Drum" as the result of a letter from Counsel for Naticco, Inc., in which they stated:

"It is noted that the term 'Recovery Drum' has been used in your recent proposal for amendment of Hazardous Materials Regulations. It is with approval that we note that in your usage of the term 'Recovery Drum', use has been made of capital letters to set it apart as a trademark. Naticco, Inc. has no objection to such usage of its trademark RECOVERY DRUM if it is accompanied with identification of Naticco, Inc. as the owner of the trademark. In the absence of such identification as a trademark owned by Naticco, Inc. you are respectfully requested to discontinue usage of the mark, since such usage would ultimately bring about dilution of the trademark and valuable rights therein that have been acquired by Naticco, Inc."

It was not the MTB's intent to impose or promote a marking that is a trademark not to bring about its dilution; therefore, the marking adopted is "SALVAGE DRUM."

Two commenters objected to the use of bottom outlets on DOT Specification MC 310 and MC 311 cargo tanks for the shipment of hydrofluoric acid (hydrogen fluoride) and hydrofluosilicic acid. Based on the information received and upon further consideration the Bureau agrees that bottom outlets should be prohibited from use on MC 310 and MC 311 cargo tanks for the above commodities.

Upon further consideration and the comments received from the Union Carbide Corporation, the proposed change to § 173.178(a)(5) has been changed by deleting the requirement for a DOT Specification 12B fiberboard box. Also, specific requirements for construction of the water-tight metal cans have been deleted and the maximum 2-quart capacity has been changed to 10 pounds. None of these changes should have any effect on safety during handling and transportation.

In consideration of the foregoing, 49 CFR Parts 172, 173, 174, 177 and 178 are amended as follows:

PART 173—SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

2. In § 173.3 paragraph (c) is revised as follows:

§ 173.3 Packaging and exceptions.

(c) Packages of hazardous materials that are damaged or found leaking during transportation, and hazardous materials that have spilled or leaked during transportation, may be placed in a metal removable head salvage drum and shipped for repackaging or disposal under the following conditions:

(1) The drum utilized may be either a DOT specification or a non-DOT specification drum as long as the drum has equal or greater structural integrity than a drum that is authorized for the respective material in this subchapter. Maximum capacity shall not exceed 110 gallons.

(2) Each drum must be provided with adequate closure and, when necessary, provided with sufficient cushioning and absorption material to prevent excessive movement of the damaged package and to absorb all free liquid. All cushioning and absorbent material used in the drum must be compatible with the hazardous materials material.

(3) Each drum must be marked with the proper shipping name of the material inside the defective packaging and the name and address of the consignee. In addition, the drum must be marked "SALVAGE DRUM".

(4) Each drum must be labeled as prescribed for the respective material.

(5) The shipper shall prepare shipping papers in accordance with Subpart C of Part 172 of this subchapter.

(6) The overpack requirements of § 173.25, and the reuse provisions of § 173.28(h) and § 173.28(m) do not apply to drums used in accordance with this paragraph.

3. In § 173.93 paragraph (b)(2) is added as follows:

§ 173.93 Propellant explosives (solid) for cannon, small arms, rockets, guided missiles, or other devices, and propellant explosives (liquid).

(b) * * *

(2) Specification 17H (§ 178.118 of this subchapter). Steel drums (single-trip) not over 30-gallon capacity each.

4. In § 173.119 paragraph (m)(14) is revised as follows:

§ 173.119 Flammable liquids not specifically provided for.

(m) * * *

(14) Specification 105A100W, 112A200W, or 114A340W (§§ 178.100 and 179.101 of this subchapter). Tank cars. Authorized only for propylene oxide except 112A200W also authorized for acrylonitrile.

5. In § 173.154 paragraph (a)(9) is revised, paragraph (a)(21) is added as follows:

§ 173.154 Flammable solids, organic peroxide solids and oxidizers not specifically provided for.

(a) * * *

(9) Specification 21C (§ 178.224 of this subchapter). Fiber drums. Maximum net weight may not exceed 225 pounds, except that a 21C400 fiber drum may have a net weight not exceeding 350 pounds.

(21) Specification 105A200ALW (§§ 179.100, 179.101 of this subchapter). Tank cars. Authorized only for a mixture of 24 to 26 percent ammonia, 68 to 70 percent ammonium nitrate and 5 to 7 percent water. Transportation by water is not authorized.

6. In § 173.157 paragraphs (a)(5), (b)(2) and (b)(3) are revised as follows:

§ 173.157 Benzoyl peroxide, chlorobenzoyl peroxide (para), cyclohexanone peroxide, dimethylhexane dihydroperoxide, lauroyl peroxide, or succinic acid peroxide, wet.

(a) * * *

(5) Specification 12B (§ 178.205 of this subchapter). Fiberboard box with securely closed inside plastic containers made of polyethylene film at least 0.004 inch thick. Net weight (dry weight) in each inside container may not exceed 25 pounds. Each inside container must be surrounded by asbestos or an equivalent fire-resistant cushioning material. Authorized only for benzoyl peroxide.

(b) * * *

(2) Specification 21C (§ 178.224 of this subchapter). Fiber drum with securely closed inside plastic containers made of polyethylene film at least 0.004 inch thick. Net weight (dry weight) in each outside drum may not exceed 55 pounds.

(3) Specification 12B (§ 178.205 of this subchapter). Fiberboard box with securely closed inside plastic containers made of polyethylene film at least 0.004 inch thick. Net weight (dry weight) in each inside container may not exceed 25 pounds. Each inside container must be surrounded by asbestos or an equivalent fire-resistant cushioning material. Net weight (dry weight) in each outside box may not exceed 50 pounds.

7. In § 173.178 paragraph (a)(5) is added as follows:

§ 173.178 Calcium carbide.

(a) * * *

(5) In water-tight metal containers not exceeding 10 pounds net weight.

8. In § 173.202 paragraph (a)(4) the second sentence is amended as follows:

§ 173.202 Sodium metal liquid alloy, potassium metal liquid alloy, and sodium potassium liquid alloy.

(a) * * *

(4) * * * Tanks shall have a minimum design pressure of 150 pounds per square inch.

9. In § 173.206 paragraph (f) is added as follows:

§ 173.206 Sodium or potassium, metallic; sodium amide; sodium potassium alloys; sodium aluminum hydride; lithium metal; lithium silicon; lithium ferro silicon; lithium hydride; lithium borohydride; lithium aluminum hydride; lithium acetylide; ethylene diamine complex; aluminum hydride; cesium metal; rubidium metal; zirconium hydride, powdered.

(f) Lithium batteries (or cells) which are hermetically sealed, containing not more than 0.5 gram each of lithium or lithium alloy, separated from each other so as to prevent short circuits and overpacked in a strong outside container are not subject to the requirements of this subchapter. This exception also applies to batteries shipped as a part of devices such as calculators, photographic equipment and watches.

10. In § 173.245 paragraph (a)(32) is revised as follows:

§ 173.245 Corrosive liquids not specifically provided for.

(a) * * *

(32) Specification 103AW, 103A-ALW, 103ANW, 103BW, 103CW, 103EW, 105A100W, 105A200ALW, 111A100F2, 111A60ALW2, 111A60W2, 111A60W5 or AAR-201A80W (§§ 178.100, 179.101, 179.200, and 179.201 of this subchapter). Tank cars. Specification 105A200ALW tank cars authorized only for acetic anhydride. Specification 105A100W tank cars authorized only for aluminum hydroxide and dimethyl chlorothiophosphate. AAR201A80W tank cars authorized only for ammonium hydroxide.

11. In § 173.247 paragraph (a)(9) is revised; paragraph (a)(12) is amended by adding the following sentence:

§ 173.247 Acetyl bromide; acetyl chloride; acetyl iodide; antimony pentachloride; benzoyl chloride; boron trifluoride acetic acid complex; chromyl chloride; dichloroacetyl chloride; diphenylmethyl bromide solutions; pyrosulfuryl chloride; silicon chloride; sulfur chloride (mono and di); sulfuryl chloride; thionyl chloride; tin tetrachloride (anhydrous); Uranium tetrachloride; trimethyl acetyl chloride.

(a) * * * (9) Specification 5C (§ 178.83 of this subchapter). Barrels or drums of Type 304 stainless steel not over 30-gallon capacity each. Authorized for chromyl chloride and thionyl chloride only.

(12) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

12. In § 173.247a paragraph (a)(3) is amended by adding the following sentence:

§ 173.247a Vanadium tetrachloride and vanadium oxytrichloride.

(a) * * * (3) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

13. In § 173.248 paragraph (a)(6) is amended by adding the following sentence:

§ 173.248 Acid sludge, sludge acid, spent sulfuric acid, or spent mixed acid.

(a) * * * (6) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

14. In § 173.249 paragraph (a)(6) is amended by adding the following sentence:

§ 173.249 Alkaline corrosive liquids, n.o.s.; alkaline liquids, n.o.s.; alkaline corrosive battery fluid; potassium fluoride solution; potassium hydrogen fluoride solution; sodium aluminate, liquid; sodium hydroxide solution; potassium hydroxide solution; boiler compound, liquid, solution.

(a) * * * (6) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

15. In § 173.250a paragraph (a)(2) is amended by adding the following sentence:

§ 173.250a Benzene phosphorus dichloride and benzene phosphorus thiodichloride.

(a) * * * (2) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

16. In § 173.252 paragraph (a)(4) the last sentence is amended and an additional sentence is added as follows:

§ 173.252 Bromine.

(a) * * * (4) * * * The total quantity loaded must not be less than 92 percent of the quantity the tank is authorized to carry. Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

17. In § 173.253 paragraph (a)(6) is amended by adding the following sentence:

§ 173.253 Chloroacetyl chloride.

(a) * * * (6) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

18. In § 173.254 paragraph (a)(5) is amended by adding the following sentence:

§ 173.254 Chlorosulfonic acid and mixtures of chlorosulfonic acid-sulfur trioxide.

(a) * * * (5) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

19. In § 173.255 paragraph (a)(5) is amended by adding the following sentence:

§ 173.255 Dimethyl sulfate.

(a) * * * (5) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

20. In § 173.256 paragraph (a)(7) is revised as follows:

§ 173.256 Compounds, cleaning, liquid.

(a) * * * (7) Specification 37M (§ 178.134 of this subchapter). Cylindrical steel overpack with inside specification 2U (§ 178.24 of this subchapter) polyethylene container. For compounds containing not more than 7 percent hydrofluoric acid by weight, the steel overpack must be a minimum of 22-gauge. For compounds containing more than 7 percent hydrofluoric acid by weight but not over 14 percent hydro-fluoric acid by weight, the steel overpack must be a minimum of 20-gauge body and 18-gauge heads. When a full removable head is used, the bolted type ring closure must be a minimum of 16-gauge.

21. In § 173.257 paragraph (a)(4) is amended by adding the following sentence:

§ 173.257 Electrolyte (acid) and alkaline corrosive battery fluid.

(a) * * * (4) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

22. In § 173.262 paragraph (a)(11) and paragraph (b)(4) are amended by adding the following sentence:

§ 173.262 Hydrobromic acid.

(a) * * * (11) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

(b) * * * (4) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

23. In § 173.263 paragraph (a)(10) is amended by adding the following sentence:

§ 173.263 Hydrochloric (muriatic) acid; hydrochloric (muriatic) acid mixtures; hydrochloric (muriatic) acid solution, inhibited; sodium chloride solution (not exceeding 42 percent sodium chloride) and cleaning compounds, liquids, containing hydrochloric (muriatic) acid.

(a) * * * (10) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

24. In § 173.267 paragraph (a)(7) is amended by adding the following sentence:

§ 173.267 Mixed acid (nitric and sulfuric acid) (nitrating acid).

(a) * * * (7) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

25. In § 173.268 paragraph (b)(3) is amended by adding the following sentence:

§ 173.268 Nitric acid.

(b) * * * (3) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

26. In § 173.272 paragraphs (i)(21), (i)(25), and (i)(28) are amended by adding the following sentence:

§ 173.272 Sulfuric acid.

(i) * * * (21) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

(25) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

(28) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

27. In § 173.273 paragraph (a)(5) is amended by adding the following sentence:

§ 173.273 Sulfur trioxide.

(a) * * *
(5) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

28. In § 173.276 paragraph (a)(6) is amended by adding the following sentence:

§ 173.276 Anhydrous hydrazine and hydrazine solution.

(a) * * *
(6) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

29. In § 173.280 paragraph (a)(8) is amended by adding the following sentence:

§ 173.280 Trichlorosilanes.

(a) * * *
(8) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

30. In § 173.289 paragraph (a)(4) is amended by adding the following sentence:

§ 173.289 Formic acid and formic acid solutions.

(a) * * *
(4) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

31. In § 173.292 paragraph (a)(2) is amended by adding the following sentence:

§ 173.292 Hexamethylene diamine solution.

(a) * * *
(2) * * * Bottom outlets are authorized on MC 310, MC 311, or MC 312 cargo tanks if they meet the requirements of § 178.343-5 of this subchapter.

32. In § 173.294 paragraph (a)(3) is amended by adding the following sentence:

§ 173.294 Monochloroacetic acid, liquid or solution.

(a) * * *
(3) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

33. In § 173.295 paragraphs (a)(9) and (a)(10) are amended by adding the following sentence:

§ 173.295 Benzyl chloride.

(a) * * *

(9) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

(10) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

34. In § 173.296 paragraph (a)(2) is amended by adding the following sentence:

§ 173.296 Diisooctyl acid phosphata.

(a) * * *
(2) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

35. In § 173.297 paragraph (a)(1) is amended by adding the following sentence:

§ 173.297 Titanium sulfate solution containing not more than 45 percent sulfuric acid.

(a) * * *
(1) * * * Bottom outlets are authorized if they meet the requirements of § 178.343-5 of this subchapter.

36. In § 173.346 paragraph (a)(20) is revised as follows:

§ 173.346 Poison B liquids not specifically provided for.

(a) * * *
(20) Specification 6D or 37M (§§ 173.102, 178.134 of this subchapter) cylindrical steel overpacks with inside specifications 2S or 2SL (§§ 178.35, 178.35a of this subchapter) polyethylene containers. Authorized for materials that will not react with polyethylene and result in container failure.

PART 174—CARRIAGE BY RAIL

37. In § 174.48 paragraph (b) is revised as follows:

§ 174.48 Leaking packages other than tank cars.

(b) Packages of hazardous materials that are damaged or found leaking during transportation, and hazardous materials that have spilled or leaked during transportation, may be forwarded to destination or returned to the shipper in a salvage drum in accordance with the requirements of § 173.3(c) of this subchapter.

PART 177—CARRIAGE BY PUBLIC HIGHWAY

38. In § 177.854 paragraph (c)(2) is revised as follows:

§ 177.854 Disabled vehicles and broken or leaking packages; repairs.

(c) * * *
(2) Packages of hazardous materials that are damaged or found leaking during transportation, and hazardous materials that have spilled or leaked during transportation, may be forwarded to destination or returned to the shipper in a salvage drum in accordance with the requirements of § 173.3(c) of this subchapter.

PART 178—SHIPPING CONTAINER SPECIFICATIONS

39. In § 178.16; § 178.16-13 the second sentence of paragraph (a)(3) is amended and an additional sentence is added as follows:

§ 178.16 Specification 35; non-reusable molded polyethylene drum for use without overpack; removable head required.

§ 178.16-13 Design qualification tests.

(a) * * *
(3) * * * the two drums of identical capacity, stacked two high, must withstand a static compression test applied evenly for 48 hours to the top rim of the top drum without buckling of the side walls or leakage. The compression weight load to be applied must be the greater of 300 pounds or the volume in gallons of one drum times 85 pounds.

40. In § 178.252, § 178.252-1 paragraph (b) is revised as follows:

§ 178.252 Specification 56; metal portable tank.

§ 178.252-1 General requirements.

(b) Each tank may not exceed a rated gross weight of 7,700 pounds.

(49 U.S.C. 1803, 1804, 1808; 49 CFR 1.53 and App. A to Part 1)

Note.—The Materials Transportation Bureau has determined that this document will not have a major economic impact under the terms of Executive Order 12044 and DOT implementing procedures (44 11034), nor an environmental impact under the National Environmental Policy Act (49 U.S.C. 4321 et seq.). A regulatory evaluation is available for review in the docket.

Issued in Washington, D.C., on October 11, 1979.

L. D. Santman,

Director, Materials Transportation Bureau.

[FR Doc. 79-32171 Filed 10-17-79; 8:45 am]