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

Title 49—Transportation

CHAPTER I—MATERIALS TRANSPORTATION BUREAU, DEPARTMENT OF TRANSPORTATION

[Docket No. HM-139; Amdt. Nos. 173-104, 177-38]

PART 173—SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

PART 177—CARRIAGE BY PUBLIC HIGHWAY

Conversion of Individual Exemptions to Regulations of General Applicability

The purpose of these amendments to the Hazardous Materials Regulations of the Department of Transportation is to incorporate therein a number of changes based on data and analysis supplied in selected exemption applications, or from existing special permits and exemptions. Adoption of these exemptions into the regulations provides wider access to the benefits of transportation innovations recognized as being effective and safe.

On November 4, 1976, the Materials Transportation Bureau (MTB) published a Notice of Proposed Rulemaking, Docket HM-139; Notice 76-10 (41 FR 48553) 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 November 30, 1976.

The few public comments received concerning these proposals either pointed out an error in Notice 76-10 or suggested slight changes in the wording to the proposed amendments. The following modifications have been made in response to those comments.

1. The holders of DOT Exemption Number 7232 objected to the requirement in the amendment of § 173.148(b) that the vapor pressure of the monoethylamine solution be marked on the containers to be authorized. The commenters argue that this is not required by DOT-E 7232, that there would be conflicts with other requirements of 49 CFR Part 173 with respect to the marking of cargo tanks and tank cars, and that such information on the shipping container serves no useful purpose. The Bureau has decided to delete this marking requirement in § 173.148(b) based upon these comments and further analysis of the proposed rule.

2. Several comments were received concerning the proposed rule change to § 173.249(a)(6) to include MC 303 cargo tanks as an authorized container for alkaline corrosive liquids, n.o.s. and alkaline liquids, n.o.s. The holder of DOT-E 7284, the exemption upon which the proposed rule is based, requests that the MC 307 cargo tank also be authorized. The MC 307 cargo tank is already authorized for these commodities under provisions of § 173.249(a)(1). Another commenter, a large containership operator, strongly opposes the inclusion of the MC 303 tank for these commodities by cargo vessel. It is argued that the pressure and vacuum relief devices set in accordance with the MC 303 specification will not adequately retain the lading within the tank in the water transportation environment. The Bureau notes that DOT-E 7284 does not authorize shipment by the water mode, and therefore, there is insufficient shipping experience to refute the contentions of the commenter. Consequently, § 173.249(a)(b) is being revised to restrict the MC 303 tank for these commodities from water transportation.

3. Notice 76-10 contained an error in the proposed amendment of § 173.377 to eliminate DOT-E 4666. That notice proposed to increase the maximum authorized capacity of the inside DOT Specification 2D paper bags to "15½ pounds" for organic phosphate compounds. The proposal should have read "20½ pounds" since this is the weight authorized by the exemption.

4. The amendment of § 173.377(b) is to authorize 67 percent concentrations of dry organic phosphate compound mixture in DOT-12B fiberboard boxes with inside DOT-2D paper bags of 4 pounds capacity. In addition, the 2D paper bags must have a foil liner and the mixture must be further packed in 1½ mil polyvinyl alcohol film pouches. The second sentence of the proposed amendment in Notice 76-10 erroneously required an inside DOT-2D paper bag with either a foil liner or with the inside polyvinyl alcohol film pouches. This amendment is based upon DOT-E 5167 which requires both of these packaging features in the DOT-2D paper bags.

5. The proposal in Notice 76-10 to eliminate DOT SP 6920 erroneously cited § 117.838(a) as the regulation affected. That regulation should have been § 177.838(a).

The Bureau is withdrawing the proposed amendment of § 173.253(a) to allow shipments of chloroacetyl chloride in DOT Specification 6D/2S or 2SL composite packaging. Such shipments are presently authorized under DOT-E 6126. However as an added control measure, the exemption also stipulates that "each container must be marked with the fill date and with the date (30 days after the fill date) after which the drum must not be shipped and a legend so stating." Furthermore these containers are not authorized for re-use. Upon further analysis of this exemption the Bureau believes that these additional control measures should be continued for chloroacetyl chloride in 6D/2S or 2SL packaging but not by incorporation into the general regulation. Accordingly, DOT-E 6126 will remain in effect and the proposed amendment to § 173.253(a) is withdrawn.

Analysis of these amendments and comments thereon indicate that the costs of regulatory enforcement will not be significantly affected, nor will additional costs be imposed on the private sector, consumers, or Federal, State, or local governments, since these amendments will authorize the general use of shipping alternatives previously available to only a few users under exemptions. The safety record or analysis of shipments under the exemptions, identified in Notice 76-10, demonstrate that significant environmental impacts will not result from any of these amendments.

Since these amendments are relaxations of existing rules, and place no additional burden on any person, they are being made effective in less than 30 days after publication in the FEDERAL REGISTER.

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

1. In § 173.88 paragraph (e)(2)(ii) is revised to read as follows:

§ 173.88 Definition of class B explosives.

* * * * *

(e) * * *

(2) * * *

(ii) Rocket motors, Class B explosives, may be shipped in a propulsive state only under conditions approved by the Department of Defense or the National Aeronautics and Space Administration.

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2. In § 173.92 paragraph (b) is revised to read as follows:

§ 173.92 Jet thrust units (jato), Class B explosives; rocket motors, Class B explosives; igniters, jet thrust (jato), Class B explosives; igniters, rocket motors, Class B explosives; and starter cartridges, jet engine, Class B explosives.

* * * * *

(b) Jet thrust units, Class B explosives, or rocket motors, Class B explosives, must not be shipped with igniters assembled therein unless shipped by, for, or to the Department of Defense or the National Aeronautics and Space Administration.

* * * * *

3. In § 173.132 paragraph (a)(2) is revised to read as follows:

§ 173.132 Cement liquid, n.o.s.; container cement; linoleum cement; pyroxylin cement; rubber cement; tile cement; wallboard cement; coating solution (flammable liquids).

(a) * * *

(2) Specification 52,[1] or 57 (§§ 178.251, 178.253 of this subchapter). Metal portable tanks. Specification 52 portable tank is authorized for materials irrespective of flash point but only those defined as viscous liquids. Not authorized for transportation by water.

* * * * *

4. In § 173.148 paragraph (b) is added to read as follows:

§ 173.148 Monoethylamine.

* * * * *

(b) Solution of monoethylamine in water which has a vapor pressure not exceeding 16 pounds per square inch absolute at 100° F. may be shipped in containers prescribed by § 173.119(d).

5. In § 173.163 paragraph (a) (8) is revised to read as follows:

§ 173.163 Chlorate of soda, chlorate of potash, and other chlorates.

(a) * * *

(8) Specification 12A (§ 178.210 of this subchapter). Fiberboard box with inside glass or plastic bottles not over 5 pounds capacity each. Not more than 4 glass bottles or 6 plastic bottles having a capacity of 5 pounds each shall be packed in one outside container. Shipper must have established that completed package meets test requirements prescribed by § 178.210–10 of this subchapter.

6. In § 173.205 paragraph (a) (2) is added to read as follows:

§ 173.205 Sodium picramate, wet.

(a) * * *

(2) Specification 21P (§ 178.225 of this subchapter). Fiber drum overpack with inside polyethylene container meeting all requirements of Specification 2U (§ 178.24 of this subchapter) except removable head is authorized. Fiber drum must be rated for a minimum net weight of 600 pounds. Maximum gross weight shall not exceed 400 pounds.

7. In § 173.214 paragraph (c) (5) is added to read as follows:

§ 173.214 Hafnium metal or zirconium metal, wet, minimum 25 percent water by weight, mechanically produced, finer than 270 mesh particle size; hafnium metal or zirconium metal, dry, in an atmosphere of inert gas, mechanically produced, finer than 270 mesh particle size; hafnium metal or zirconium metal, wet, minimum 25 percent water by weight, chemically produced (see Note 1), finer than 20 mesh particle size; hafnium metal or zirconium metal, dry, in an atmosphere of inert gas, chemically produced (see Note 1), finer than 20 mesh particle size.

* * * * *

(c) * * *

(5) Specification 6D (§ 178.102 of this subchapter). Cylindrical steel overpack with inside specification 2S (§ 178.35 of this subchapter) noncarbon polyethylene container. Container is limited to single trip only and may not exceed a capacity of 5 gallons. Net weight of contents must not exceed 50 pounds of dry material.

* * * * *

8. In § 173.217 paragraph (a) (6) is revised to read as follows:

§ 173.217 Calcium hydrochlorite mixture, dry; lithium hypochlorite mixture, dry; mono-(trichloro) tetramonopotassium dichloro) - penta-s-triazinetrione, dry; potassium dichloro-s-triazientrione, dry; sodium dichloro-s-triazinetrione, dry; trichloro-s-triazinetrione, dry.

(a) * * *

(6) Specification 56 (§§ 178.251, 178.252 of this subchapter). Metal portable tank. Authorized only for mono - (trichloro) tetra-(monopotassium dichloro)-penta-s-triazinetrione, dry; potassium dichloro-s-triazinetrione, dry; sodium dichloro-s-triazinetrione, dry; and trichloro-s-triazinetrione, dry. For rail transportation, see § 174.63(b) of this subchapter.

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9. In § 173.219 paragraph (a) (1) is revised to read as follows:

§ 173.219 Potassium perchlorate.

(a) * * *

(1) As prescribed in § 173.154 (a) (1) to (a) (11) and (a) (14). Plastic bottles may be substituted for the inside glass bottles prescribed in § 173.154 (a) (6).

10. In § 173.221 paragraph (a) (7) is revised to read as follows:

§ 173.221 Liquid organic peroxides, n.o.s., and liquid organic peroxide solutions, n.o.s.

(a) * * *

(7) Specification 6D or 37M (nonreuseable container) (§§ 178.102, 178.134 of this subchapter). Cylindrical steel overpacks with inside Specifications 2S or 2SL (§§ 178.35, 178.35a of this subchapter) polyethylene containers. Authorized only for materials which will not react dangerously with or cause decomposition of the polyethylene.

* * * * *

11. In § 173.223 paragraph (a) (1) is revised and paragraph (a) (6) is added to read as follows:

§ 173.223 Peracetic acid.

(a) * * *

(1) Specification 15A, 15B, 15C, 16A or 19A (§§ 178.168, 178.169, 178.170, 178.185, 178.190 of this subchapter). Wooden boxes with inside containers which must be glass, earthenware, or polyethylene not over 1-gallon capacity each, cushioned with sterile absorbent cotton or other cushioning material which will not react with the contents to generate heat. Polyethylene container must have a vented closure capable of preventing leakage of liquid contents. Cushioning material must be in sufficient quantity to completely absorb the contents of the inner container. Boxes with inside polyethylene containers must be appropriately marked "Keep This Side Up."

* * * * *

(6) Specification 21P (§ 178.225 of this subchapter). Fiber drum overpack with inside specification 2SL (§ 178.35a of this subchapter) polyethylene container not over 30-gallon capacity. Container must have a vented closure to prevent accumulation of internal pressure and the head with closure must be marked "Keep This End Up".

* * * * *

12. In § 173.247 paragraph (a) (17) is revised to read as follows:

§ 173.247 Acetyl bromide, acetyl chloride, acetyl iodide, antimony pentachloride, benzoyl chloride, boron trifluoride-acetic acid complex, chromyl chloride, dichloroacetyl chloride, diphenylmethyl bromide solution, pyro sulfuryl chloride, silicon chloride, sulfur chloride (mono and di), sulfuryl chloride, thionyl chloride, tin tetrachloride (anhydrous), titanium tetrachloride, and trimethyl acetyl chloride.

(a) * * *

(17) Specification 4BA240 or 4BW (§§ 178.51, 178.61 of this subchapter). Metal cylinder. Authorized only for titanium tetrachloride or tin tetrachloride, anhydrous, without any compressed gas. Specification 4BW carbon steel cylinder authorized for antimony pentachloride. Safety relief devices are not authorized.

13. In § 173.249 paragraph (a) (6) is revised to read as follows:

§ 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 solution.

(a) * * *

(6) Specification MC 303, MC 310, MC 311 or MC 312 (§ 178.343 of this subchapter). Tank motor vehicles. Specification MC 303 is authorized for alkaline corrosive liquids, n.o.s., and alkaline liquids, n.o.s. only and is not authorized for transportation by water.

* * * * *

14. In § 173.256 paragraph (a) (6) is added to read as follows:

§ 173.256 Compounds, cleaning, liquid.

(a) * * *

(6) Specification 37M (§ 178.134 of this subchapter) (nonreuseable). Cylindrical steel overpack with inside specifications 2SL (§ 178.35a of this subchapter) polyethylene container. Maximum net weight shall not exceed 490 pounds. Authorized only for compounds containing not more than 30 percent hydrofluoric acid.

15. In § 173.264 paragraph (a) (11) is revised; paragraph (a) (18) is added to read as follows:

§ 173.264 Hydrofluoric acid; white acid.

(a) * * *

(11) Specification 103B,[1] 103BW, 111A100W4, or 111A60W5 (§§ 179.200, 179.201 of this subchapter). Tank cars, rubber-lined tanks. Authorized only for acid not over 40 percent strength except Specification 111A100W4 tanks are authorized only for acid of 70 percent strength.

* * * * *

(18) Specification 34 (§ 178.19 of this subchapter). Polyethylene container without overpack, not over 5-gallon capacity. Authorized only for hydrofluoric acid not over 52 percent strength.

* * * * *

16. In § 173.265 paragraph (b) (3) is revised to read as follows:

§ 173.265 Hydrofluosilicic acid.

* * * * *

(b) * * *

(3) Specification 103B,[1] 103BW, 111A60W5, or 111A100W2 (§ 179.200, 179.201 of this subchapter). Tank cars, rubber-lined or elastomer lined tanks.

* * * * *

17. In § 173.277 paragraph (a) (8) is added to read as follows:

§ 173.277 Hypochlorite solutions.

(a) * * *

(8) Specification 37P (§ 178.133 of this

subchapter). Steel drums with poly-lene liner (nonreuseable container). liners must be vented to prevent mulation of pressure and the head closure must be marked "Keep This End Up." Authorized for not over 16 percent solutions of sodium hypochlorite only.

* * * * *

18. In § 173.346 paragraph (a) (20) is revised to read as follows:

§ 173.346 Poison B liquids not specifically provided for.

(a) * * *

(20) Specification 6D (§ 178.102 of this subchapter). Cylindrical steel overpack with inside Specification 2S or 2SL (§§ 178.35, 178.35a of this subchapter) polyethylene containers. Authorized only for materials that will not react with polyethylene and result in container failure.

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19. In § 173.353 paragraph (e) is revised to read as follows:

§ 173.353 Methyl bromide and methyl bromide mixtures.

* * * * *

(e) Specifications MC 330 and MC 331 (§ 178.337 of this subchapter). Tank motor vehicle having a design pressure not less than 250 pounds per square inch equipped with an approved spring-relief safety valve. Outage must be sufficient to prevent tank from becoming entirely filled with liquid at 130° F.

20. In § 173.357 paragraph (b) (2) is revised to read as follows:

3.357 Chloropicrin and chloropicrin mixtures containing no compressed gas or Poison A liquid.

* * * * * *

(b) * * *

(2) Specification 5A or 5B (§§ 178.81, 178.82 of this subchapter). Metal drums not exceeding 33-gallon capacity with welded seams. Specification 5B authorized only for chloropicrin mixtures containing not over 30 percent chloropicrin by weight. Removable head containers not authorized.

* * * * *

21. In § 173.358 paragraph (a) (11) is revised and paragraph (a) (14) is added to read as follows:

§ 173.358 Hexaethyl tetraphosphate, methyl parathion, organic phosphate compound, organic phosphorous compound, parathion, tetraethyl dithio pyrophosphate, and tetraethyl pyrophosphate, liquid.

(a) * * *

(11) Specification 105A300W (§ 179.-100, 179.101 of this subchapter). Tank cars. Authorized for parathion, methyl parathion and liquid organic phosphate compounds only. Thet nominal water capacity of a tank car must not exceed 12,-000 gallons.

* * * * *

(14) Specification MC 330 or MC 331 (§ 178.337 of this subchapter). Tank motor vehicle. Bottom outlets, if any, must be equipped with valves conforming with § 178.337-11(c) of this subchapter. Contents of the tank must be under s pressure except its own vapor pres-.. Authorized for parathion, methyl parathion and organic phosphate compound only, and by private motor carrier only.

22. In § 178.359 paragraph (a) (16) is added to read as follows:

§ 173.359 Hexaethyl tetraphosphate mixtures; methyl parathion mixtures; organic phosphorus compound mixtures; organic phosphate compound mixtures; parathion mixtures; tetraethyl dithio pyrophosphate mixtures; and tetraethyl pyrophosphate mixtures, liquid (includes solutions, emulsions, or emulsifiable liquids).

(a) * * *

(16) Specification MC 330 or MC 331 (§ 178.337 of this subchapter). Tank motor vehicles. Bottom outlets, if any, must be equipped with valves conforming with § 178.337-11(c) of this subchapter. Contents of the tank must be under no gas pressure except its own vapor pressure. Authorized for parathion mixtures, methyl parathion mixtures and liquid organic phosphate compound mixtures only, and by private motor carrier only.

* * * * *

23. In § 173.365 paragraph (a) (5) is added to read as follows:

§ 173.365 Poison B solids not specifically provided for.

(a) * * *

(5) Specification 12B (§ 178.205 of this subchapter). Fiberboard boxes, with inside wide-mouth, high-density polyethylene jars of 2½-pound capacity with a minimum wall thickness of 0.020 inch, or of 3-pound capacity with a minimum wall thickness of 0.035 inch. Each jar must have a screw-cap closure and not more than six jars are authorized per box. Completed package must meet test requirements of § 178.210-10 of this subchapter.

* * * * *

24. In § 173.377 paragraphs (a) (1) and (a) (2) are revised and paragraph (b) (6) is added to read as follows:

§ 173.377 Hexaethyl tetraphosphate mixtures; methyl parathion mixtures; organic phosphorus compound mixtures; organic phosphate compound mixtures; parathion mixtures; tetraethyl dithio pyrophosphate mixtures; and tetraethyl pyrophosphate mixtures, dry.

(a) * * *

(1) Specification 12B or 12C (§§ 178.205, 178.206 of this subchapter), fiberboard boxes, with inside containers which must be metal or fiber cans not over 12 pounds capacity each, or paper bags. Specification 2D (§ 178.23 of this subchapter), not over 20½ pounds capacity each. Fiberboard boxes manufactured and marked for a gross weight of 65 pounds may have a gross weight of 70 pounds provided net weight of contents does not exceed 62 pounds. Inside containers and the completed package must be capable of withstanding the tests prescribed in paragraphs (c), (d), and (e) of this section.

(2) Specification 15A or 15B (§§ 178.168, 178.169 of this subchapter), wooden boxes with inside containers which must be metal or fiber cans not over 12 pounds capacity each, or paper bags, Specification 2D (§ 178.23 of this subchapter), not over 20½ pounds capacity each. Inside containers must be capable of withstanding the tests prescribed in paragraphs (c) and (d) of this section.

* * * * *

(b) * * *

(6) Specification 12B (§ 178.205 of this subchapter) fiberboard box, with inside Specifications 2D (§ 178.23 of this subchapter) paper bags not over 4 pounds capacity each. Paper bags must also have an additional foil liner and the mixture must be further packed in water soluble 1½ mil polyvinyl alcohol film pouches of not more than 8 ounces capacity with not more than ten pouches per bag. Completed package must not exceed 65 pounds gross weight and must meet the test requirements of paragraphs (d) and (e) of this section. Authorized only for mixtures in which the liquid is absorbed in concentrations no greater than 67 percent.

* * * * *

25. In § 177.838 paragraph (a) is revised to read as follows:

§ 177.838 Flammable solids and oxidizing materials.

(See also § 177.834(a) to (k)).

(a) *Lading within body or covered; tailgate closed; pick-up and delivery.* All of that portion of the lading of any motor vehicle transporting flammable solids or oxidizing materials shall be contained entirely within the body of the motor vehicle and shall be covered by such body, by tarpaulins, or other suitable means, and if such motor vehicle has a tailboard or tailgate, it shall be closed and secured in place during such transportation: Provided, however, that the provisions of this paragraph need not apply to "pick-up and delivery" motor vehicles when such motor vehicles are used in no other transportation than in and about cities, towns, or villages. Shipment of phosphorus pentasulfide in tightly closed DOT Specification 56 metal portable tanks need not be covered by a tarpaulin while being transported on flat bed motor vehicles.

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Effective date: This amendment is effective on February 28, 1977.

AUTHORITY: (49 U.S.C. 1803, 1804, 1808; 49 CFR 1.53(e).)

(NOTE.—The Materials Transportation Bureau has determined that this document does not contain a major proposal requiring preparation of an Economic Impact Statement under Executive Order 11821 and OMB Circular A-107.)

Issued in Washington, D.C., on February 18, 1977.

JAMES T. CURTIS, Jr.,
Director,
Materials Transportation Bureau.

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