Railroad	From—	To—
Chesapeake & Ohio.	Michigan-Ohio State line (north of Alexis, Ohio).	Alexis, Ohio.
Detroit & Toledo Shore Line.	Michigan-Ohio State line (north of Toledo, Ohio).	Toledo, Ohio.
Penn Central	Michigan-Indiana State line (north Vistula, Ind.).	Tower B, Elkhart, Ind.
Do	Michigan-Ohio State line (north of Alexis, Ohio).	Alexis, Ohio.
Do	Michigan-Indiana State line (south of Niles, Mich.).	South Bend, Ind.
Do	Michigan-Indiana State line (south of Sturgis, Mich.).	Fort Wayne, Ind.

(4) *Michigan operations excepted from Michigan nonadvanced time.* Those portions of the following lines of railroad located within the State of Michigan and east of the zone boundary described in this section, are, for operating purposes only, excepted from the requirement to operate in accordance with Michigan's nonadvanced eastern time and permitted to operate on eastern standard time (advanced) during the period from 2 a.m. on the last Sunday in April to 2 a.m. on the last Sunday in October.

Railroad	From—	To—
Ann Arbor	Ohio-Michigan State line (north of Alexis, Ohio).	Owosso, Mich.
Detroit, Toledo & Ironton.	Ohio-Michigan State line (north of Metamora, Ohio).	Detroit and Dearborn, Mich.
Do	Ohio-Michigan State line (north of Denson, Ohio).	Tecumseh, Mich.
Do	Ohio-Michigan State line (North of Alexis, Ohio) (over the tracks of the Ann Arbor Railroad).	Diann, Mich.
Penn Central	Indiana-Michigan State line (north of Ray, Ind.).	Jackson, Mich.
Do	White Pigeon Junction, Mich.	Jonesville, Mich.
Do	Litchfield, Mich	Osseo, Mich.
Do	Bankers, Mich	North Adams, Mich.
Do	Morenci, Mich	Palmyra, Mich.
Do	Clayton, Mich	Ida, Mich.
Do	Ohio-Michigan State line (south of Ottawa Lake, Mich.).	Clinton, Mich.
Do	Ohio-Michigan State line (north of Alvordton, Ohio).	Jackson, Mich.
Do	Cement City, Mich	Brooklyn, Mich.

* * * * *

[F.R. Doc. 69-5187; Filed, Apr. 30, 1969; 8:48 a.m.]

Chapter I—Hazardous Materials Regulations Board, Department of Transportation

[Docket No. HM-3; Amdts. 171-3, 172-2, 173-6, 174-3, 177-5, 178-3, 179-2]

MISCELLANEOUS AMENDMENTS TO CHAPTER

The purpose of these amendments is to make a number of miscellaneous changes in the Hazardous Materials Regulations. These amendments are, for the most part, based on Notice 68-2 (Docket No. HM-3) which was issued by the Hazardous Materials Regulations Board on February 16, 1968 (33 F.R. 3382).

As a result of numerous requests, on August 2, 1968, the Board announced an extension of the time for comment on that portion of the notice relating to the definition of flammable liquids and the transportation of liquefied gases in the lower temperature ranges. After analyzing the numerous comments received in this regard, the Board has decided to reconsider these proposals. The Board has also determined not to adopt at this time certain definitions proposed in the notice. Other proposals contained in the notice that have either been dropped or altered are specifically discussed hereinafter. Therefore, the action taken in this document is to be considered as final action on Notice 68-2 (Docket HM-3) and if after reconsideration, it is determined that further rule making action is warranted on any of the items that were proposed, but not adopted, a new notice of proposed rule making will be issued.

The significant comments and the changes (other than minor corrections and editorial changes) from the notice are discussed below.

1. The proposed definition of the term "hazardous material" has been modified so that as adopted it states simply that the term is synonymous with the term "explosives and other dangerous articles", as contained in 18 U.S.C. 831-835. The proposed definition of "transport vehicle" was included in a recent amendment relating generally to radioactive materials (33 F.R. 14920).

2. The notice proposed to amend several sections relating to the shipping of explosives (e.g., §§ 173.21, 173.79, 173.86, 173.92, and 173.95) to substitute Department of Transportation "approval" for Bureau of Explosives "approval." The Board has concluded that, until the Department is staffed to efficiently and competently perform functions that for many years have been performed by the Bureau of Explosives, the approval authority should remain with the Bureau of Explosives.

3. Section 173.30 has been modified to make it clear that it applies to any person loading or unloading dangerous articles, not only shippers, and that of the referenced requirements only those applicable in a particular case need be complied with.

4. Section 173.51(g) has been simplified by stating the intended exception from the forbidden explosives category by a reference to § 173.86.

5. As proposed in the notice, § 173.86 is amended to permit shipment of new explosives if examined and approved by the Department of Defense. This has been accomplished by a general reference to Department of Defense examination and approval rather than by reference to a specific DoD classification procedure. The Board believes that since there has been no reference in the past to a specific Bureau of Explosives approval procedure (and since B of E approval is being retained for other than military shipments) there is no need to specify the DoD classification procedure to be used.

6. As proposed, a definition of practice cartridge ammunition has been added to § 173.100. For consistency with the commodity list, the defined term has been changed to "cartridge, practice ammunition".

Also, the language in the proposed definition that would have necessitated looking to the intended use of the ammunition in addition to its specific characteristics, has been deleted as inappropriate to a transportation safety determination.

7. Paragraph (a)(4) of § 173.188 has been modified to make it clear that a specification 6K metal drum can be used to ship phosphoric anhydride at a gross weight exceeding 480 pounds only where the test requirements of § 178.101-11 have been met at a 600-pound gross weight.

8. Section 173.304(b)(2) has been modified to provide a reference to § 173.316(a)(2) for the pressure-controlling valve requirement for liquefied hydrogen in 4L cylinders thereby imposing a more restrictive requirement than for certain other materials.

9. Proposed § 173.316(a)(2) has been reorganized for clarity. For consistency with §§ 177.840 and 178.57-8, the venting rate is expressed in standard cubic feet "per hour" rather than "per minute". Also, the language relating to a venting rate has been changed to permit for a single cylinder a maximum venting rate of 30 standard cubic feet per hour rather than 60 as was implied by the proposed language. This change is consistent with § 177.840 as proposed and as adopted since the figure of 60 cubic feet per hour is intended as a maximum per motor vehicle and not per cylinder. Several comments objected to the proposed requirement that the pressure must be manually vented to not exceeding 8 p.s.i.g. not more than 2 hours before loading. The Board believes that a manual venting requirement is desirable to minimize to the maximum extent feasible the amount of venting that will occur during transportation. However, the Board believes that the desired objective can be achieved by permitting the manual venting up to 4 hours before the beginning of transportation rather than relating the requirement to a period of time before loading.

10. Paragraph (k) of § 173.393 is deleted since the provisions thereof are now covered by § 173.30 as revised in this amendment.

11. The only significant change in § 174.566, as adopted, is to substitute the words "thoroughly cleaned" for the words "flushed out with water" since water could be inappropriate for use in removing certain poisons.

12. Since the purpose of the proposed change to § 174.589 was merely to accomplish a clarification, it has been dropped from this amendment and will be considered in connection with a complete revision of § 174.589 now under study.

13. Section 177.801 is amended as proposed to include private carriers within its scope. However, the proposed amendment to require that the methods of manufacturing, packing, and storage of hazardous materials be open to inspection by representatives of this Department has not been adopted at this time. Failure to adopt this proposal is not due, as suggested by some commenters, to any lack of authority in the Department to impose such a requirement, but rather to withhold any change to § 177.801 until comparable changes have been proposed to parallel §§ 173.1, 174.500, 175.650, and 176.700.

14. Except for minor reorganization, § 177.840 is adopted as proposed. One commenter objected to inclusion of special loading requirements applicable to the 4L cylinder. The experience gained under special permits that justified this amendment was under conditions that included comparable loading requirements. The Board is not satisfied that an adequate level of safety would be maintained if these requirements were deleted.

15. In addition to the changes proposed in the notice, § 178.37–5(a) is amended by deleting note 3 thereto since, as pointed out by commenters, retention of the note would be inconsistent with the intent of the proposed change to authorize generally the use of basic oxygen process steel.

16. The notice proposed to amend §§ 178.51–20, 178.60–4, and 178.61–5 to include tables of authorized steel and check analysis tolerances. In addition, commenters pointed out that these tables should have been included in § 178.56–20. To avoid repeating these identical tables four times in the regulations these items have been included as Table I of Appendix A to Part 178 and references to the appendix have been included in the four sections as applicable. In addition, commenters pointed out that, in the interest of safety, a phosphorus limitation should be specified for the chemical composition of grade three steel and that an allowance should be made for rephosphorized steels. Both of these comments are valid and accordingly a phosphorus limit of 0.045 is included for grade three steel and a new note 6 has been added to Table I to authorize and to provide limiting criteria for the use of rephosphorized steel.

17. As a result of comments received, and to make the venting requirements for liquefied hydrogen in the specification for 4L cylinders consistent with those requirements contained in §§ 173.316(a)(2) and 177.840(a)(2), paragraph (c) of § 178.57–8 as adopted authorizes a maximum heat transfer that will not cause venting of more than 30 standard cubic feet of hydrogen gas per hour as a basis for design and construction rather than 1 percent of the contents in a period of 24 hours as proposed.

18. Notice 68–2 proposed to add a new paragraph (a)(5) to § 178.57–20 containing additional marking requirements for liquefied hydrogen in specification 4L cylinders. As pointed out by several comments, the Board concluded that the marking requirements contained elsewhere in the regulations (§§ 173.316(a)(2) and 173.401(a)) together with the present marking requirements of § 178.57–20 are adequate. Therefore, the proposed changes to § 178.57–20 have not been adopted.

19. As was pointed out in comments received on the notice, the proposed clarifying change to §§ 178.82–9, 178.115–8, and 178.116–8 could cause more confusion than clarification. Therefore, no change in these sections has been made.

20. One comment objected to inclusion of the 3/16-inch minimum thickness requirement in § 178.337–10(b) in addition to the performance requirements therein. This is not a substantive change but merely a rearrangement which moves the present 3/16-inch minimum thickness requirement for protective housing from paragraph (a) of § 178.337–3(a) to paragraph (b) of § 178.337–10.

21. As a result of the comments received, the proposed revision of § 178.337–13(b) which was for the purpose of clarification has not been adopted since it could have resulted in an unintentional substantive change.

Many commenters, in response to notice 68–2, proposed changes that were beyond the scope of the notice. These proposed changes could not be considered for inclusion in this amendment. Since most of the proposals did not contain the supporting data required under Part 170 of the Board's regulations for petitions for rule making, those commenters on Notice 68–2 that wish their proposals to receive further consideration should resubmit them in accordance with the requirements of § 170.11.

Interested persons were afforded an opportunity to participate in this rule making and due consideration has been given to all relevant matter presented.

In consideration of the foregoing, 49 CFR Parts 171, 172, 173, 174, 177, 178, and 179 are amended, effective September 3, 1969. However, compliance with the regulations as amended herein is authorized immediately.

These amendments are made under the authority of sections 831–835 of Title 18, United States Code, section 9 of the Department of Transportation Act (49 U.S.C. 1657), and Title VI and section 902(h) of the Federal Aviation Act of 1958 (49 U.S.C. 1421–1430 and 1472(h)).

PART 171—GENERAL INFORMATION AND REGULATIONS

I. Part 171 is amended as follows:

(A) Section 171.8 is amended by adding paragraph (m) to read as follows:

§ 171.8 Definitions.

* * * * *

(m) "Hazardous materials" means "explosives and other dangerous articles" as used in title 18, United States Code, sections 831–835.

PART 172—COMMODITY LIST OF EXPLOSIVES AND OTHER DANGEROUS ARTICLES CONTAINING THE SHIPPING NAME OR DESCRIPTION OF ALL ARTICLES SUBJECT TO PARTS 171–179 OF THIS CHAPTER

II. Part 172 is amended as follows:

§ 172.4 [Amended]

(A) Note 1 following paragraph (a) in § 172.4 is canceled.

(B) In § 172.5 paragraph (a) the Commodity List is amended as follows:

§ 172.5 List of explosives and other dangerous articles.

(a) * * *

Article	Classed as—	Exemptions and packing (see sec.)	Label required if not exempt	Maximum quantity in one outside container by rail express
Change				
* * *	* * *	* * *	* * *	* * *
*Compounds, cleaning, liquid (*containing hydrochloric (muriatic) acid*)	Cor. L	173.244,173.263	White	10 pints.
Add				
* * *	* * *	* * *	* * *	* * *
Cartridges, practice ammunition	Expl. C	No exemption, 173.101a		150 pounds.
* * *	* * *	* * *	* * *	* * *

PART 173—SHIPPERS

III. Part 173 is amended as follows:

(A) In the Table of Contents §§ 173.30, 173.79, 173.86, 173.92, and 173.102 are amended; § 173.101a is added to read as follows:

Sec.

173.30 Loading and unloading of transport vehicles.

173.79 Jet thrust units (jato), class A explosives; rocket motors, class A explosives; igniters, jet thrust (jato), class A explosives; and igniters, rocket motor, class A explosives.

173.86 New explosives and samples for laboratory examination.

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.

173.101a Cartridges, practice ammunition.

173.102 Explosive cable cutters; explosive power devices, class C; explosive release devices, or starter cartridges, jet engine, class C explosives.

(B) Section 173.30 is amended in its entirety to read as follows:

§ 173.30 Loading and unloading of transport vehicles.

(a) Any person who loads or unloads shipments of hazardous materials into or from transport vehicles shall comply with the applicable loading and unloading provisions of Parts 174 and 177 this chapter as follows:

(1) Rail: Sections 174.525 through 174.567.

(2) Highway: Sections 177.834 through 177.848.

(C) Paragraph (q) in § 173.51 is amended to read as follows:

§ 173.51 Forbidden explosives.

* * * * *

(q) New explosives and explosive devices except as provided for in § 173.86.

* * * * *

(D) In § 173.53 paragraph (t) (2) (ii) is amended to read as follows:

§ 173.53 Definition of class A explosives.

* * * * *

(t) * * *

(2) * * *

(ii) Rocket motors, class A explosives may be shipped in a propulsive state only under conditions approved by the Department of Defense.

* * * * *

(E) Section 173.79 is amended in its entirety to read as follows:

§ 173.79 Jet thrust units (jato), class A explosives; rocket motors, class A explosives; igniters, jet thrust (jato), class A explosives; and igniters, rocket motor, class A explosives.

(a) Class A explosives covered by this section must be packaged in outside packagings complying with the following specifications:

(1) Specification 14, 15A, 15E, or 16A (§§ 178.165, 178.168, 178.172, 178.185 of this chapter) wooden boxes, or wooden boxes, fiberboard lined.

(2) Wooden boxes, wooden crates, or other packagings of approved military specifications which comply with § 173.7 (a), or other packagings approved by the Bureau of Explosives.

(b) Jet thrust units, class A explosives or rocket motors, class A explosives, must not be shipped with igniters assembled therein unless shipped by, for, or to the Department of the Army, the Department of the Navy, or the Department of the Air Force.

(c) Jet thrust units class A explosives or rocket motors, class A explosives, may be packaged in the same outside packaging with their separately packaged igniters (or igniter components), class A, B, or C explosives only in packagings approved by the Bureau of Explosives or of approved military specifications complying with § 173.7(a).

(d) Each package must be plainly marked "Jet Thrust Units, Class A Explosives", "Rocket Motors, Class A Explosives", "Igniters, Jet Thrust, Class A Explosives", or "Igniters, Rocket Motor, Class A Explosives", as appropriate.

(e) Class A explosives listed in this section must not be offered for transportation by rail express, except as provided in § 173.86 or § 175.675 of this chapter.

(F) In § 173.86 paragraph (a) is amended to read as follows:

§ 173.86 New explosives and samples for laboratory examination.

(a) New explosives including fireworks and explosive devices, other than Army, Navy, or Air Force explosive or chemical ammunition of a security classification, must be examined and approved by either the Bureau of Explosives or the Department of Defense as safe for transportation before being offered for shipment except that a sample of such explosives, fireworks, and explosive devices, not to exceed five pounds net weight, may be offered for transportation by carriers by rail freight, highway, or water for this examination. Except for shipments of sample quantities as provided for in this section, a written notification of the classification and approval accompanied by a supporting laboratory report or equivalent data must be filed with the Department before the new explosive or explosive device is offered for shipment. Samples of explosives, except liquid nitroglycerin, other than new explosives for laboratory examination not exceeding 5 pounds net weight, may be offered for transportation by carriers by rail freight, highway, or water. For the purpose of Parts 170–189 of this chapter, a new explosive, including fireworks and explosive devices, is the product of a new factory or an explosive or explosive device of an essentially new composition or character made by any factory.

* * * * *

(G) In § 173.88 paragraph (e) (2) (ii) is amended 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.

* * * * *

(H) Section 173.92 is amended in its entirety 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.

(a) Class B explosives covered by this section must be packaged in outside packagings complying with the following specifications:

(1) Specification 14, 15A, 15E, or 16A (§§ 178.165, 178.168, 178.172, 178.185 of this chapter) wooden boxes, or wooden boxes, fiberboard lined.

(2) Specification 15B (§ 178.169 of this chapter) wooden boxes. Authorized only for igniters, jet thrust, class B exposives, or igniters, rocket motors, class B explosives.

(3) Specification 23F (§ 178.214 of this chapter) fiberboard boxes. Authorized only for igniters, jet thrust, class B explosives; igniters, rocket motor, class B explosives; or starter cartridges, jet engine, class B explosives. Items must be packaged in tightly closed inside fiberboard boxes (at least 200-pound test (Mullen or Cady)) or metal containers. Starter cartridges, jet engine, must have igniter wires short-circuited when packed for shipment.

(4) Wooden boxes, wooden crates, or other packagings of approved military specification which comply with § 173.7 (a), or other packagings approved by the Bureau of 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 the Army, the Department of the Navy, or the Department of the Air Force.

(c) Jet thrust units, class B explosives, or rocket motors, class B explosives, may be packaged in the same outside packaging with their separately packaged igniters (or igniter components), class A, B, or C explosives, only in packagings approved by the Bureau of Explosives or of approved military specifications complying with § 173.7(a).

(d) Each package must be plainly marked "Jet Thrust Units, Class B Explosives", "Rocket Motors, Class B Explosives", "Igniters, Jet Thrust, Class B Explosives", "Igniters, Rocket Motors, Class B Explosives", or "Starter Cartridges, Jet Engine, Class B Explosives" as appropriate.

(e) Label: Each package, when offered for transportation by rail express, must have securely and conspicuously attached thereto a square red label as described in § 173.412.

(I) Section 173.95 is amended to read as follows:

§ 173.95 Rocket engines (liquid), class B explosives.

(a) Rocket engines must be packaged in outside packaging complying with the following specifications:

(1) Specification 14, 15A, 15E, or 16A (§§ 178.165, 178.168, 178.172, 178.185 of this chapter) wooden boxes, or wooden boxes, fiberboard lined.

(2) Wooden boxes or metal packagings of approved military specification which comply with § 173.7(a), or other packagings approved by the Bureau of Explosives.

(b) Rocket engines (liquid), class B explosives, must not be shipped with igniters or initiators assembled therein unless shipped by, for, or to the Department of the Army, the Department of the Navy, or the Department of the Air Force, and only when authorized by the Department of Defense or by the Bureau of Explosives.

(c) Rocket engines (liquid), class B explosives, may be packed in the same outside packaging with separately packaged igniters, jet thrust, class B explosives when authorized by the Department of Defense or when packagings are approved by the Bureau of Explosives.

(d) Each package must be plainly marked "Rocket Engines (Liquid), Class B Explosives."

(e) Except as provided in §§ 173.86 and 175.675 of this chapter, rocket engines (liquid), class B explosives, must not be offered for transportation by rail express.

(J) Paragraph (ff) is added at the end of § 173.100 to read as follows:

§ 173.100 Definition of class C explosives.

* * * * *

(ff) "Cartridge, practice ammunition" means a metal cartridge case containing a primer, a propelling charge of not more than 500 grains of propellant powder, and a solid projectile or a projectile containing a smoke spotting charge.

(K) Section 173.101a is added to read as follows:

§ 173.101a Cartridges, practice ammunition.

(a) Cartridges, practice ammunition must be packaged in pasteboard or other inside boxes, or in partitions designed to fit snugly in the outside packaging, or must be packed in metal clips. The partitions and metal clips must be so designed as to protect the primers from accidental injury. The inside boxes, partitions, and metal clips must be packaged in securely closed strong outside wooden or fiberboard boxes or metal packagings.

(1) Each package must be plainly marked "Cartridges, Practice Ammunition."

(L) In § 173.102 the heading and paragraph (b) are amended to read as follows:

§ 173.102 Explosive cable cutters; explosive power devices, class C; explosive release devices, or starter cartridges, jet engine, class C explosives.

* * * * *

(b) Each package must be plainly marked "Explosive Cable Cutters"; "Explosive Power Devices, Class C"; "Explosive Release Devices", or "Starter Cartridges, Jet Engine, Class C Explosives", as appropriate, and "Handle Carefully—Keep Fire Away."

(M) In § 173.188 paragraph (a) (4) is amended to read as follows:

§ 173.188 Phosphoric anhydride.

(a) * * *

(4) Specification 6K (§ 178.101 of this chapter). Metal drums. Authorized only for carload or truckload shipments by rail freight or highway and must be loaded by the shipper and unloaded by the consignee or his duly authorized agent. Authorized net weight not over 600 pounds. If the gross weight is more than 480 pounds, the shipper must have established that the drums meet the drop test requirements prescribed in § 178.101–11 of this chapter at 600 pounds gross weight.

* * * * *

(N) In § 173.220 the introductory text of paragraph (a) is amended to read as follows:

§ 173.220 Magnesium or zirconium scrap consisting of borings, clippings, shavings, sheets, turnings, or scalpings, and magnesium metallic (other than scrap), powdered, pellets, turnings, or ribbon.

(a) Magnesium or zirconium scrap consisting of borings, shavings, or turnings, must be packed in closed metal barrels or drums, wooden barrels, metal pails, fiber drums, or four-ply paper bags. Paper bags are not authorized for less-than-carload or less-than-truckload shipments.

* * * * *

(O) Paragraph (a) (27) is added in § 173.245 to read as follows:

§ 173.245 Acids or other corrosive liquids not specifically provided for.

(a) * * *

(27) Specification 33A (§ 178.150 of this chapter). Polystyrene case (nonreusable container) having one inside glass bottle of not over 16 ounces capacity.

(P) Paragraph (a) (18) is added in § 173.271 to read as follows:

§ 173.271 Phosphorus oxybromide, phosphorus oxychloride, phosphorus trichloride, and thiophosphoryl chloride.

(a) * * *

(18) Specification 5B (§ 178.82 of this chapter). Metal barrels or drums lined with a material which is compatible with the commodity. Authorized for thiophosphoryl chloride only.

(Q) In § 173.276 paragraph (a) (4) and (5) is amended to read as follows:

§ 173.276 Anhydrous hydrazine and hydrazine solution.

(a) * * *

(4) Specification 103C–W or 111A 100W6 (§§ 179.200 and 179.201 of this chapter). Tank cars having tanks of Type 304L or 347 stainless steel with molybdenum content not exceeding one-half of 1 percent. The safety relief valve on specification 103C–W tank car tanks may have a start-to-discharge pressure of not more than 45 p.s.i. in place of 35 p.s.i. Specification 111A100W6 tanks must not be equipped with bottom outlets. Vapor space in tanks must be filled with nitrogen gas at atmospheric pressure.

(5) Specification 103A–ALW (§§ 179.200 and 179.201 of this chapter). Tank cars. The safety relief valve on tanks may have a start-to-discharge pressure of not more than 45 p.s.i. in place of 35 p.s.i. Vapor space in tanks must be filled with nitrogen gas at atmospheric pressure. Authorized for anhydrous hydrazine only.

* * * * *

(R) In § 173.304 Note 9 following paragraph (a) (2) Table is canceled; paragraph (b) (2) is amended to read as follows:

§ 173.304 Charging of cylinders with liquefied compressed gas.

* * * * *

(b) * * *

(2) The pressure in DOT–4L cylinders (§ 178.57 of this chapter) must be limited by a pressure controlling valve so sized and set as to limit the pressure to one and one-fourth times the marked service pressure. For hydrogen, a valve must be set as specified in § 173.316(a) (2). The design and installation of pressure-controlling valves must be such as to assure that they will not malfunction because of frost accumulation. The liquid portion of the gas must not completely fill the cylinder. For DOT–4L cylinders insulated by a vacuum, the pressure control valve must be set at least 15 p.s.i. lower than one and one-fourth times the marked service pressure. The other paragraphs of this section do not apply to DOT–4L cylinders.

* * * * *

(S) Paragraph (a) (2) is added in § 173.316 to read as follows:

§ 173.316 Liquefied hydrogen.

(a) * * *

(2) Specification 4L (§ 178.57 of this chapter) cylinders, in accordance with the following requirements:

(i) Service temperature: minus 423° F. or colder.

(ii) Maximum filling density, based on cylinder capacity at minus 423° F.: 6.7 percent.

(iii) Pressure must be limited by a pressure-controlling valve set to limit pressure to not more than 17 p.s.i.

(iv) Each cylinder must be constructed, insulated, and maintained so that during transportation the total rate of venting shall not exceed 30 standard cubic feet of hydrogen per hour.

(v) In addition to the marking required by § 178.57–20 of this chapter, the total rate of venting in standard cubic feet per hour shall be marked on the top of each head or valve protection band in letters at least one-half inch high as follows: "Vent Rate ** CFH" with the stars replaced by figures signifying the standard hydrogen venting rate for the cylinder.

(vi) Transportation is limited to private and contract motor carriers under conditions specified in § 177.840(a) (1) of this chapter.

(vii) Pressure in each cylinder must be reduced to 8 p.s.i.g. or lower at least once within 4 hours before the beginning of transportation.

(T) In § 173.333 paragraph (a) (1) is amended to read as follows:

§ 173.333 Phosgene or diphosgene.

(a) * * *

(1) As prescribed in § 173.328 of this part, filling density (see § 173.304(a) (2) Table Note 1) must not exceed 125 percent and a cylinder must not contain more than 150 pounds phosgene.

* * * * *

(U) Section 173.368 is amended to read as follows:

§ 173.368 Arsenical dust, arsenical flue dust, and other poisonous noncombustible byproduct dusts; also arsenic trioxide, calcium arsenate, and sodium arsenate.

(a) Arsenical dust, arsenical flue dust, and other poisonous noncombustible byproduct dusts from metal recovery operations not subject to dangerous spontaneous heating, and arsenic trioxide, calcium arsenate, or sodium arsenate, when delivery is made to plants with private sidings only may, in addition to packagings prescribed in § 173.367, be shipped in bulk in the following kinds of cars, if those cars are assigned exclusively to this type of service: (1) Sift-proof, self-clearing, hopper or bottom outlet steel cars, (2) sift-proof all steel flat bottom gondola cars with fixed sides and ends equipped with waterproof and dust-proof wooden or steel covers well secured in place for all openings, and (3) sift-proof box cars of all steel construction. Cars assigned exclusively to this service must be marked "Arsenical Service Only", in addition to other required markings, and are not subject to § 174.566(b) of this chapter while in that service.

(b) Arsenical dust and arsenic trioxide may, in addition to the packagings specified in § 173.367, be shipped in bulk in motor vehicles with steel, sift-proof, self-clearing hopper-type, or dump-type bodies, with waterproof and dust-proof covers, well secured in place, and which are assigned exclusively to this type of service. These vehicles shall be marked "Arsenical Service Only", in addition to other required markings, and are not subject to § 177.841(a) (2) of this chapter while in that service.

(V) In § 173.370 paragraph (c) (1) is amended to read as follows:

§ 173.370 Cyanides, or cyanide mixtures, except cyanide of calcium and mixtures thereof.

* * * * *

(c) * * *

(1) As prescribed in paragraph (a) (2), (3), (4), (6), (9), or (11) of this section.

* * * * *

(W) In § 173.377 paragraph (a) (5) is amended to read as follows:

§ 173.377 Hexaethyl tetraphosphate mixtures, methyl parathion mixtures, organic phosphate compound mixtures, n.o.s., parathion mixtures, tetraethyl dithio pyrophosphate mixtures, and tetraethyl pyrophosphate mixtures, dry.

(a) * * *

(5) Specification 21C (§ 178.224 of this chapter). Fiber drums. Authorized net weight not over 250 pounds.

* * * * *

(X) In § 173.384 paragraph (a) (2) is amended to read as follows:

§ 173.384 Monochloracetone, stabilized.

(a) * * *

(2) Specification 15A, 15B, 15C, or 16A (§§ 178.168, 178.169, 178.170, 178.185 of this chapter). Wooden boxes with inside glass bottles or tubes in metal cans hermetically sealed or with covers securely taped. The metal cans must be in corrugated fiberboard cartons, specification 2C (§ 178.22 of this chapter). Bottles must not contain more than 1 pound of liquid each, must not be filled to more than 95 percent capacity, must be tightly and securely closed, and must be cushioned in cans with at least one-half inch of absorbent material. Cans must be made of metal at least 32-gauge U.S. Standard. The total amount of liquid per package must not exceed 24 pounds.

(Y) In § 173.385 paragraph (a) (1) is amended to read as follows:

§ 173.385 Tear gas grenades, tear gas candles, or similar devices.

(a) * * *

(1) Specification 15A, 15B, or 15C (§§ 178.168, 178.169, 178.170 of this chapter). Metal-strapped wooden boxes. Functioning elements not assembled in grenades or devices must be in a separate compartment of these boxes, or in inside or separate outside boxes, specification 15A, 15B, or 15C, and must be so packed and cushioned that they may not come in contact with each other or with the walls of boxes during transportation. Not more than 50 grenades and 50 functioning devices shall be packed in one package and the gross weight of the package must not exceed 75 pounds.

* * * * *

§ 173.393 [Amended]

(Z) Paragraph (k) in § 173.393 is canceled.

PART 174—CARRIERS BY RAIL FREIGHT

IV. Part 174 is amended as follows:

(A) In § 174.538(a) the Chart is amended by adding the following new footnote and adding a footnote "f" reference at the intersection of vertical column 15 and horizontal columns a, b, c, d, e, f, and g, respectively.

§ 174.538 Loading and storage chart of explosives and other dangerous articles.

(a) * * *

[f] Normal uranium, depleted uranium, and thorium metal in solid form may also be loaded and transported with articles named in vertical and horizontal columns a, b, c, d, e, f, and g.

* * * * *

(B) Paragraph (b) in § 174.566 is amended to read as follows:

§ 174.566 Cleaning cars.

* * * * *

(b) After unloading poisons or potassium permanganate from steel hopper cars or other cars, cars must be thoroughly cleaned except that cars used exclusively in this service under the provisions of §§ 173.194(a) and 173.368(a) of this chapter shall not be subject to this requirement.

* * * * *

PART 177—SHIPMENTS MADE BY WAY OF COMMON, CONTRACT, OR PRIVATE CARRIERS BY PUBLIC HIGHWAY

V. Part 177 is amended as follows:

(A) Sections 177.800, 177.801 are amended in the Table of Contents to read as follows:

Sec.
177.800 Purpose of regulations in Parts 170–189 of this chapter.
177.801 Scope of regulations in Parts 170–189 of this chapter.

(B) The heading of § 177.800 is amended to read as follows; paragraph (a) is amended by adding "private," before the word common in the first sentence thereof.

§ 177.800 Purpose of regulations in Parts 170–189 of this chapter.

* * * * *

(C) The heading of § 177.801 is amended to read as follows; paragraph (a) is amended by adding "private," before the word common in the first sentence thereof.

§ 177.801 Scope of regulations in Parts 170–189 of this chapter.

* * * * *

(D) In § 177.840 paragraph (a) (1) is amended and a new paragraph (a) (2) is added to read as follows:

§ 177.840 Compressed gases.

* * * * *

(a) * * *

(1) *Cylinders.* To prevent their overturning, cylinders containing compressed gases must be securely lashed in an upright position; loaded into racks securely attached to the motor vehicle; packed in boxes or crates of such dimensions as to prevent their overturning; or loaded in a horizontal position. Specification DOT–4L cylinders must be loaded in an upright position and securely braced.

(2) *Cylinders for liquefied hydrogen.* Specification DOT–4L cylinders containing liquefied hydrogen must be transported only on motor vehicles with open bodies which are equipped with suitable racks or supports having clamps or securing bands capable of holding the cylinders upright when they are subjected to an acceleration of at least 2 "g" in any horizontal direction.

(i) The combined total of the hydrogen venting rates as marked on the cylinders on one motor vehicle must not exceed 60 standard cubic feet per hour.

(ii) Motor vehicles loaded with cylinders containing liquefied hydrogen may not be driven through tunnels.

(iii) Highway transportation is limited to private and contract motor carriers only and to direct movement from point of origin to destination.

* * * * *

(E) In § 177.841 paragraph (a) (1) and (2) has been added to read as follows:

§ 177.841 Poisons.

(a) * * *

(1) The motor vehicles must be marked in accordance with § 173.368(b) of this chapter.

(2) Before any motor vehicle may be used for transporting any other articles, all detectable traces of arsenical materials must be removed therefrom by flushing with water, or by other appropriate method, and the marking removed.

* * * * *

(F) In § 177.848(a) the Chart is amended by adding the following new footnote and adding a footnote "f" reference at the intersection of vertical column 15 and horizontal columns a, b, c, d, e, f, and g, respectively.

§ 177.848 Loading and storage chart of explosives and other dangerous articles.

(a) * * *

[f] Normal uranium, depleted uranium, and thorium metal in solid form may also be loaded and transported with articles named in vertical and horizontal columns a, b, c, d, e, f, and g.

* * * * *

PART 178—SHIPPING CONTAINER SPECIFICATIONS

VI. Part 178 is amended as follows:

(A) In the table of contents, §§ 178.63, 178.66, and 178.67 are amended to read as follows:

Sec.
178.63 Specification 9; seamless, welded or brazed steel cylinders.
178.66 Specification 40; nonrefillable seamless, welded or brazed steel cylinders.
178.67 Specification 41; nonrefillable seamless, welded or brazed steel cylinders.

(B) In § 178.37–5 the introductory text preceding the table in paragraph (a) is amended; note 3 is canceled as follows:

§ 178.37 Specification 3AA; seamless steel cylinders made of definitely prescribed steels or 3AAX; seamless steel cylinders made of definitely prescribed steels of capacity over 1,000 pounds water volume.

§ 178.37–5 Authorized steel.

(a) Open-hearth, basic oxygen, or electric steel of uniform quality. The following chemical analyses are authorized (see note 1):

* * * * *

NOTE 3: [Canceled]

(C) In § 178.48–5 paragraph (a) is amended to read as follows:

§ 178.48 Specification 4; forge welded steel cylinders.

§ 178.48–5 Steel.

(a) Open-hearth, basic oxygen, or electric steel of uniform quality. Content percent for the following not over: Carbon, 0.25; phosphorus, 0.045; sulfur, 0.050. However, Bessemer steel with phosphorus not over 0.11 percent is authorized when carbon content is 0.20 percent or less.

(D) In § 178.49–5 paragraph (a) is amended to read as follows:

§ 178.49 Specification 4A; forge welded steel cylinders.

§ 178.49–5 Steel.

(a) Open-hearth, basic oxygen, or electric steel of uniform quality. Content percent for the following not over: Carbon, 0.25; phosphorus, 0.045; sulfur, 0.050.

(E) Section 178.51–20 is amended to read as follows:

§ 178.51 Specification 4BA; welded or brazed steel cylinders made of definitely prescribed steels.

§ 178.51–20 Authorized steel.

(a) As specified in Table I of Appendix A to this part.

* * * * *

(F) In § 178.52–5 paragraph (a) is amended to read as follows:

§ 178.52 Specification 4C; welded and brazed steel cylinders.

§ 178.52–5 Steel.

(a) Open-hearth, basic oxygen, or electric steel of uniform quality. Content percent for the following not over: Carbon, 0.25; phosphorus, 0.045; sulfur, 0.050.

(G) In § 178.55–5 paragraph (a) is amended to read as follows:

§ 178.55 Specification 4B240ET; welded and brazed cylinders made from electric resistance welded tubing.

§ 178.55–5 Steel.

(a) Open-hearth, basic oxygen, or electric steel of uniform quality. Plain carbon steel content percent for the following not over: Carbon, 0.25; phosphorus, 0.045; sulfur, 0.050. The addition of other elements for alloying effect is prohibited.

(H) Section 178.56–20 is amended to read as follows:

§ 178.56 Specification 4AA480; welded steel cylinders made of definitely prescribed steels.

§ 178.56–20 Authorized steel.

(a) As specified in Table I of Appendix A to this part.

* * * * *

(I) In § 178.57–2 paragraphs (a) and (c) are amended; in § 178.57–8 paragraph (c) is amended; in § 178.57–21 paragraph (a) Table 1 footnote 1 is amended to read as follows:

§ 178.57 Specification 4L; welded cylinders insulated.

§ 178.57–2 Type, size, service pressure,[1] and service temperature.[2]

(a) *Type and size.* Must be fusion welded; not over 1,000 pounds water capacity (nominal). For liquefied hydrogen service, the cylinders must be designed to stand on end, with the axis of the cylindrical portion vertical.

* * * * *

(c) The service temperature shall be minus 320° F. or colder. For liquefied hydrogen service, the service temperature shall be minus 423° F. or colder.

§ 178.57–8 Manufacture.

* * * * *

(c) The surface of the cylinder must be insulated. The insulating material must be fire resistant. The insulation must be covered with a steel jacket of not less than 0.060-inch thickness so constructed that moisture cannot come in contact with the insulating material. The construction must be such that the total heat transfer from the atmosphere at ambient temperature to the contents of the cylinder shall not exceed 0.0005 B.t.u. per hour per Fahrenheit degree differential in temperature per pound of water capacity of the cylinder. For liquefied hydrogen service, the total heat transfer, with a temperature difference of 520 Fahrenheit degrees, must not exceed that required to vent 30 standard cubic feet of hydrogen gas per hour.

§ 178.57–21 Authorized steels.

(a) * * *

[1] Identical to ASTM A–240, type 304, except as modified above.

* * * * *

(J) Section 178.60–4 is amended to read as follows:

§ 178.60 Specification 8AL; steel cylinders with approved porous filling for acetylene.

§ 178.60–4 Authorized steel.

(a) As specified in Table I of Appendix A to this part.

* * * * *

(K) Section 178.61–5 paragraph (a) is amended to read as follows:

§ 178.61 Specification 4BW; welded steel cylinders made of definitely prescribed steels with electric-arc welded longitudinal seam.

§ 178.61–5 Authorized steel.

(a) As specified in Table I of Appendix A to this part.

* * * * *

(L) In § 178.63 the heading is amended; in § 178.63–5 paragraph (a) is amended to read as follows:

§ 178.63 Specification 9; seamless, welded or brazed steel cylinders.

§ 178.63–5 Steel.

(a) Open-hearth, basic oxygen, or electric steel of uniform quality. Content

percent for the following not over: Carbon, 0.150; phosphorus, 0.045; sulfur, 0.055.

(M) In § 178.66 the heading is amended; in § 178.66–5 paragraph (a) is amended to read as follows:

§ 178.66 Specification 40; nonrefillable seamless, welded or brazed steel cylinders.

§ 178.66–5 Steel.

(a) Open-hearth, basic oxygen, or electric steel of uniform quality. Content percent for the following not over: Carbon, 0.150; phosphorus, 0.045; sulfur, 0.055.

(N) In § 178.67 the heading is amended; in § 178.67–5 paragraph (a) is amended to read as follows:

§ 178.67 Specification 41; nonrefillable seamless, welded or brazed steel cylinders.

§ 178.67–5 Steel.

(a) Open-hearth, basic oxygen, or electric steel of uniform quality. Content percent for the following not over: Carbon, 0.150; phosphorus, 0.045, sulfur, 0.055.

§ 178.150–3 [Amended]

(O) In § 178.150–3 paragraph (a) (2) table is amended by striking out the first figure "¾" in the first column and inserting the figure "⅝" in place thereof.

(P) Section 178.337–3 is amended in its entirety; in § 178.337–10 paragraph (b) is amended to read as follows:

§ 178.337 Specification MC 331; cargo tanks constructed of steel, primarily for transportation of compressed gases as defined in the Compressed Gas Section.

§ 178.337–3 Thickness of tank metal.

(a) Tank metal thickness must be as required by the ASME Code and paragraph (b) of this section, except that metal of thickness less than three-sixteenths inch may not be used for the shell or heads. A corrosion allowance of 20 percent or 0.10 inch, whichever is less, must be added to the thickness otherwise required for sulfur dioxide and chlorine tank material. In chlorine tanks the wall thickness must be at least five-eighths inch, including corrosion allowance.

(b) The minimum thickness of metal in the tank shell must be such that at no point therein will the stress on a plane normal to the cylindrical axis exceed 25 percent of the minimum specified tensile strength of the metal. For purposes of this requirement, calculation must be made by the formula:

$$S=\frac{T}{2}+\left[\frac{T^2}{4}+S_s^2\right]^{0.5}$$

where, at any given point under consideration and for the worst combination of loadings:

S=Effective stress as limited by this requirement:

T=The sum of the longitudinal tensile stresses due to internal pressure and other causes including direct tensile stress due to a rearward accelerative force equal to twice the static weight, tensile stress due to the bending moment of a rearward accelerative force equal to twice the static weight, applied at the road surface, and tensile flexure stress due to three times the static weight in vertical loading; and

S_s=The vectorial sum of the shear stresses in the plane in question, including direct vertical shear due to three times the static vertical loading, direct lateral shear due to a lateral accelerative force of twice the static weight, and torsional shear due to a lateral accelerative force equal to twice the static weight, applied at the road surface. Maximum concentrated stresses which might be created at pads and cradles due to shear, bending, and torsion shall also be calculated in accordance with appendix G of the ASME Code, 1962 edition.

NOTE 1: The forces, loads, and stresses concerned in the foregoing requirement relate to the weight of the tank itself, its contents, and articles supported by the tank, not including the weight of structures supporting the tank in normal operating condition. The stresses involved are not all uniform through the length of the tank shell.

(c) Where any tank support is attached to any part of a tank head, the stresses imposed upon the head shall be as required in paragraph (b) of this section with respect to maximum concentrated stresses at pads and cradles.

§ 178.337–10 Protection of fittings.

* * * * *

(b) The protective devices or housing must be designed to withstand static loading in any direction equal to twice the weight of the tank and attachments when filled with the lading, using a safety factor of not less than four, based on the ultimate strength of the material to be used, without damage to the fittings protected, and must be made of metal at least 3/16-inch thick.

* * * * *

APPENDIX A—SPECIFICATIONS FOR STEEL

TABLE I

Open-hearth, basic oxygen, or electric steel of uniform quality. The following chemical composition limits are based on ladle analysis.

Designation	Chemical composition, percent—ladle analysis		
	Grade 1 [1]	Grade 2 [1 2]	Grade 3 [2 4 5]
Carbon	0.10/0.20	0.24 maximum	0.22 maximum.
Manganese	1.10/1.60	0.50/1.00	1.25 maximum.
Phosphorus, maximum	0.04	0.04	
Sulfur, maximum	0.05	0.05	0.05.
Silicon	0.15/0.30	0.30 maximum	
Copper, maximum	0.40		
Columbium		0.01/0.04	
Heat treatment authorized	(3)	(3)	(3).
Maximum stress (p.s.i.)	35,000	35,000	35,000.

CHECK ANALYSIS TOLERANCES

A heat of steel made under any of the above grades, the ladle analysis of which is slightly out of the specified range, is acceptable if the check analysis is within the following variations:

Element	Limit or maximum specified (percent)	Tolerance (percent) over the maximum limit or under the minimum limit	
		Under minimum limit	Over Maximum limit
Carbon	To 0.15 inclusive	0.02	0.03
	Over 0.15 to 0.40 inclusive	0.03	0.04
Manganese	To 0.60 inclusive	0.03	0.03
	Over 0.60 to 1.15 inclusive	0.04	0.04
	Over 1.15 to 2.50 inclusive	0.05	0.05
Phosphorus [6]	All ranges		0.01
Sulfur	All ranges		0.01
Silicon	To 0.30 inclusive	0.02	0.03
	Over 0.30 to 1.00 inclusive	0.05	0.05
Copper	To 1.00 inclusive	0.03	0.03
	Over 1.00 to 2.00 inclusive	0.05	0.05
Nickel	To 1.00 inclusive	0.03	0.03
	Over 1.00 to 2.00 inclusive	0.05	0.05
Chromium	To 0.90 inclusive	0.03	0.03
	Over 0.90 to 2.10 inclusive	0.05	0.05
Molybdenum	To 0.20 inclusive	0.01	0.01
	Over 0.20 to 0.40 inclusive	0.02	0.02
Zirconium	All ranges	0.01	0.05
Columbium	To 0.04 inclusive	0.005	0.01
Aluminum	Over 0.10 to 0.20 inclusive	0.04	0.04
	Over 0.20 to 0.30 inclusive	0.05	0.05

[1] Addition of other elements to obtain alloying effect is not authorized.
[2] Ferritic grain size 6 or finer according to ASTM E112–63.
[3] Any suitable heat treatment in excess of 1,100° F., except that liquid quenching is not permitted.
[4] Other alloying elements may be added and shall be reported.
[5] For compositions with a maximum carbon content of 0.15 percent on ladle analysis, the maximum limit for manganese on ladle analysis may be 1.40 percent.
[6] Rephosphorized steels not subject to check analysis for phosphorus.

PART 179—SPECIFICATIONS FOR TANK CARS

VII. Part 179 is amended as follows:

(A) In § 179.202–14 paragraphs (b) and (c) have been added to read as follows:

§ 179.202 Special commodity requirements for nonpressure tank car tanks.

§ 179.202–14 Anhydrous hydrazine and hydrazine solutions containing 50 percent or less of water.

* * * * *

(b) Specification 103CW tanks may be equipped with a safety relief valve having start-to-discharge pressure of not more than 45 p.s.i. in place of 35 p.s.i.

(c) Specification 103A–ALW tank cars authorized for transporting anhydrous hydrazine only, may have tanks equipped with a safety relief valve having start-to-discharge pressure of not more than 45 p.s.i. in place of 35 p.s.i.

Issued in Washington, D.C., on April 25, 1969.

W. J. SMITH,
Admiral, U.S. Coast Guard, Commandant.

R. N. WHITMAN,
Administrator, Federal Railroad Administration.

F. C. TURNER,
Administrator, Federal Highway Administration.

SAM SCHNEIDER,
Board Member, for the Federal Aviation Administration.

[F.R. Doc. 69–5226; Filed, Apr. 30, 1969; 8:51 a.m.]

Title 21—FOOD AND DRUGS

Chapter I—Food and Drug Administration, Department of Health, Education, and Welfare

SUBCHAPTER B—FOOD AND FOOD PRODUCTS

PART 120—TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE CHEMICALS IN OR ON RAW AGRICULTURAL COMMODITIES

Trifluralin

A petition (PP 9F0787) was filed with the Food and Drug Administration by the Elanco Products Co., Division of Eli Lilly & Co., Indianapolis, Ind. 46206, proposing the establishment of tolerances for negligible residues of the herbicide trifluralin (α,α,α-trifluoro-2,6-dinitro-*N*,*N*-dipropyl-*p*-toluidine) in or on the raw agricultural commodities grapes, hops, and root crop vegetables.

The Secretary of Agriculture has certified that this pesticide chemical is useful for the purposes for which the tolerances are being established.

Based on consideration given the data submitted in the petition, and other relevant material, the Commissioner of Food and Drugs concludes that:

1. Since the proposed usage and usages for which tolerances have previously been established are not reasonably expected to result in residues of the pesticide being in the edible tissues and byproducts of animals fed the above-named commodities, tolerances are unnecessary regarding meat, milk, eggs, and poultry. The usages are classified in the category specified in § 120.6(a)(3).

2. The tolerances established by this order will protect the public health.

Therefore, pursuant to the provisions of the Federal Food, Drug, and Cosmetic Act (sec. 408(d)(2), 68 Stat. 512; 21 U.S.C. 346a(d)(2)) and under authority delegated to the Commissioner (21 CFR 2.120), § 120.207 is amended to establish the subject tolerances by revising the paragraph "0.05 part per million * * *" to read as follows:

§ 120.207 Trifluralin; tolerances for residues.

* * * * *

0.05 part per million (negligible residue) in or on citrus fruits, cottonseed, cucurbits, forage legumes, fruiting vegetables, grapes, hops, leafy vegetables, nuts, peanuts, root crop vegetables (except carrots), safflower seed, seed and pod vegetables, stone fruits, sugarcane, and sunflower seed.

Any person who will be adversely affected by the foregoing order may at any time within 30 days from the date of its publication in the FEDERAL REGISTER file with the Hearing Clerk, Department of Health, Education, and Welfare, Room 5440, 330 Independence Avenue SW., Washington, D.C. 20201, written objections thereto, preferably in quintuplicate. Objections shall show wherein the person filing will be adversely affected by the order and specify with particularity the provisions of the order deemed objectionable and the grounds for the objections. If a hearing is requested, the objections must state the issues for the hearing. A hearing will be granted if the objections are supported by grounds legally sufficient to justify the relief sought. Objections may be accompanied by a memorandum or brief in support thereof.

Effective date. This order shall become effective on the date of its publication in the FEDERAL REGISTER.

(Sec. 408(d)(2), 68 Stat. 512; 21 U.S.C. 346a(d)(2))

Dated: April 24, 1969.

J. K. KIRK,
Associate Commissioner for Compliance.

[F.R. Doc. 69–5157; Filed, Apr. 30, 1969; 8:45 a.m.]

PART 121—FOOD ADDITIVES

Subpart C—Food Additives Permitted in Feed and Drinking Water of Animals or for the Treatment of Food-Producing Animals

Subpart D—Food Additives Permitted in Food for Human Consumption

CHLORMADINONE ACETATE

A. The Commissioner of Food and Drugs, having evaluated the data in a petition (FAP 5D1515) filed by Elanco Products Co., Division of Eli Lilly & Co., Indianapolis, Ind. 46206, and other relevant material, concludes that the food additive regulations should be amended to provide for the safe use of chlormadinone acetate for synchronization of estrus (heat) in beef heifers and beef cows. Therefore, pursuant to the provisions of the Federal Food, Drug, and Cosmetic Act (sec. 409(c)(1), 72 Stat. 1786; 21 U.S.C. 348(c)(1)) and under authority delegated to the Commissioner (21 CFR 2.120), Part 121 is amended by adding to Subpart C the following new section:

§ 121.238 Chlormadinone acetate.

The food additive chlormadinone acetate may be safely used in accordance with the following prescribed conditions:

(a) The additive is the chemical 6-chloro-17-hydroxypregna-4, 6-diene-3, 20-dione acetate ($C_{23}H_{29}ClO_4$) having a melting point range of from 212° C.–214° C. and a minimum assay limit of 95 percent.

(b) The additive is used or intended for use as follows:

CHLORMADINONE ACETATE IN FEED

	Amount	Limitations	Indications for use
Chlormadinone acetate.	10 mg. per head per day.	For beef heifers and beef cows only; administer in feed for 18 days; do not administer within 28 days of slaughter; do not administer to cows producing milk for food.	Synchronization of estrus (heat).

(c) To assure safe use, the labels and labeling of the additive in any intermediate premix, finished feed, or final dosage form prepared therefrom shall bear, in addition to the other information required by the act, the following:

(1) The name of the additive.

(2) A statement of the quantity of the additive contained therein.

(3) Adequate directions and warnings for use.

B. Based upon the data before him and proceeding under the authority of the act (sec. 409(c)(3), (4), 72 Stat. 1786, as amended 76 Stat. 785; 21 U.S.C. 348(c)(3), (4)), delegated as cited above, the Commissioner concludes that a tolerance limitation is required to assure that the edible tissues and by-products of animals treated with chlormadinone acetate in accordance with § 121.238 are safe for human consumption. Because of the additive's hormone activity and its corresponding potential carcinogenicity, a method of analysis of edible products is included below pursuant to the provisions of section 409(c)(3)(A) of the act. Accordingly,