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TITLE 16—COMMERCIAL PRACTICES

Chapter I—Federal Trade Commission

[Docket 5923]

PART 3—DIGEST OF CEASE AND DESIST ORDERS

COVIDEO, INC., ET AL.

Subpart—*Advertising falsely or misleadingly:* § 3.15 *Business status, advantages, or connections—History: Personnel or staff: Plant and equipment: Producer status of dealer—Manufacturer:* § 3.90 *History of product or offer;* § 3.130 *Manufacture or preparation.* In connection with the offer for sale, sale or distribution of coin-operated television sets or any other similar electronic product or any component part thereof in commerce, and on the part of respondent corporation, and the two individual respondents, individually and as officers thereof, and on the part of respondents' agents, etc., representing, directly or by implication, (1) that they manufacture coin-operated radios or coin-operated television sets or any component parts of either; (2) that respondent Covideo, Inc., is not a new company, or that it has been in business for any greater period of time than is actually the fact; (3) that they maintain a staff of competent engineers and technicians, or adequate facilities for research and experimentation either in the field of television or in connection with the development and manufacture of coin-operated television sets; or, (4) that the coin-operated television sets they sell embody the results of research and experimentation by their own staff of engineers or technicians; prohibited.

(Sec. 6, 38 Stat. 722; 15 U. S. C. 46. Interpret or apply sec. 5, 38 Stat. 719, as amended; 15 U. S. C. 45) [Cease and desist order, Covideo, Inc., et al., Docket 5923, Feb. 29, 1952]

In the Matter of Covideo, Inc., a Corporation, and Sidney I. Horwitt, Individually and as an Officer of Said Corporation, and Louis Brown, Individually and as an Officer of Said Corporation

This proceeding was heard by J. Earl Cox, hearing examiner, theretofore duly designated by the Commission, upon the Commission's complaint, the answer of the corporate respondent, and a hearing at which the two individual respondents appeared and testified, and at which testimony and other evidence in support of and in opposition to the allegations of the complaint were introduced before said examiner and were duly recorded and filed in the office of the Commission.

Thereafter the proceeding regularly came on for final consideration by said examiner on the complaint, the answer thereto, testimony and other evidence and proposed findings as to the facts and conclusions presented by counsel, oral argument not having been requested, and said examiner, having duly considered the record in the matter, and having found that the proceeding was in the interest of the public, made his initial decision comprising certain findings as to the facts,[1] conclusion drawn therefrom [1] and order to cease and desist.

No appeal having been filed from said initial decision of said trial examiner as provided for in Rule XXII, nor any other action taken as thereby provided to prevent said initial decision becoming the decision of the Commission thirty days from service thereof upon the parties, said initial decision, including said order to cease and desist, accordingly, under the provisions of said Rule XXII became the decision of the Commission on February 29, 1952.

The said order to cease and desist is as follows:

It is ordered, That the respondents, Covideo, Inc., a corporation and Sidney I. Horwitt and Louis Brown, individually and as officers of said corporation, and respondents' agents, representatives and employees, directly or through any corporate or other device, in connection with the offering for sale, sale or distribution of coin-operated television sets or any other similar electronic product or any component part thereof in commerce, as "commerce" is defined in the Federal Trade Commission Act, do forthwith cease and desist from representing, directly or by implication:

(1) That they manufacture coin-operated radios or coin-operated television sets or any component parts of either;

(2) That respondent Covideo, Inc., is not a new company, or that it has been in business for any greater period of time than is actually the fact;

(3) That they maintain a staff of competent engineers and technicians, or

[1] Filed as part of the original document.

(Continued on p. 4407)

CONTENTS

FEDERAL REGISTER

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CONTENTS—Continued

CONTENTS—Continued

CONTENTS—Continued

CODIFICATION GUIDE

A numerical list of the parts of the Code of Federal Regulations affected by documents published in this issue. Proposed rules, as opposed to final actions, are identified as such.

CODIFICATION GUIDE—Con.

adequate facilities for research and experimentation either in the field of television or in connection with the development and manufacture of coin-operated television sets;

(4) That the coin-operated television sets they sell embody the results of research and experimentation by their own staff of engineers or technicians.

J. EARL COX,
Hearing Examiner.

JANUARY 18, 1952.

By "Decision of the Commission and order to file report of compliance", Docket 5923, February 29, 1952, which announced and decreed fruition of said initial decision, report of compliance with the said order was required as follows:

It is ordered, That the respondents herein shall, within sixty (60) days after service upon them of this order, file with the Commission a report in writing setting forth in detail the manner and form in which they have complied with the order to cease and desist.

Issued: February 29, 1952.

By the Commission.

[SEAL] D. C. DANIEL,
Secretary.

[F. R. Doc. 52-5387; Filed, May 14, 1952; 8:50 a. m.]

TITLE 32A—NATIONAL DEFENSE, APPENDIX

Chapter III—Office of Price Stabilization, Economic Stabilization Agency

[Ceiling Price Regulation 113, Revision 1, Amdt. 9]

CPR 113—WHITE FLESH POTATOES

SALES TO ARMED FORCES

Pursuant to the Defense Production Act of 1950, as amended (Pub. Law 774, 81st Cong., Pub. Law 96, 82d Cong.), Executive Order 10161, and Economic Stabilization Agency Order No. 2, this Amendment 9 to Ceiling Price Regulation 113, Revision 1, is hereby issued.

STATEMENT OF CONSIDERATIONS

This amendment to Revision 1 of Ceiling Price Regulation 113 alters the permissible markup for sales of potatoes to the Armed Forces of the United States. It allows country shippers who sell potatoes to the Armed Forces to add a markup of 86 cents per hundredweight to the f. o. b. country shipping point ceiling price, and intermediate sellers who sell potatoes to the Armed Forces to add 80 cents per hundredweight to the primary price, as determined under this regulation.

The Department of the Army has represented to the Office of Price Stabilization that it is having difficulty in obtaining potatoes for the Armed Forces because sellers find it more profitable to sell to others from whom they can secure higher markups than in the case of sales made to the Armed Forces. Since it is the declared purpose of the Defense Production Act of 1950, as amended, to promote the national defense by meeting, promptly and effectively, the requirements of military programs in support of our national security, this amendment is issued to encourage sales to the Armed Forces and thereby facilitate their procurement programs. Because the new markup allowed to sellers of potatoes by this amendment is equal to the highest markup which they can obtain under the regulation, it is anticipated that they will have adequate incentive to make sales to the Armed Forces.

Because of the necessity for speed it was deemed impracticable to consult members of the industry affected and trade association representatives. It is the judgment of the Director that the provisions of this amendment are generally fair and equitable, and are necessary to effectuate the purpose of the Defense Production Act of 1950, as amended.

AMENDATORY PROVISIONS

Revision 1 to CPR 113 is amended in the following respect:

1. By adding a new section at the end of section 3 reading as follows:

SEC. 3a. *Sales to the Armed Forces of the United States.* If you are a country shipper and make sales of potatoes to the Armed Forces of the United States, your ceiling price shall be your f. o. b. country shipping point ceiling price for those potatoes plus 86 cents per hundredweight. If you are an intermediate seller and make sales of potatoes to the Armed Forces of the United States, your ceiling price for those potatoes shall be your primary price plus 80 cents per hundredweight.

(Sec. 704, 64 Stat. 816, as amended; 50 U. S. C. App. Sup. 2154)

Effective date. This amendment is effective May 13, 1952.

JOSEPH H. FREEHILL,
Acting Director of Price Stabilization.

[F. R. Doc. 52-5452; Filed, May 13, 1952; 4:13 p. m.]

[Ceiling Price Regulation 129, Amdt. 1]

CPR 129—CEILING PRICES FOR HORSEMEAT PRODUCTS

SAUSAGE CONTAINING HORSEMEAT, AND MISCELLANEOUS AMENDMENTS

Pursuant to the Defense Production Act of 1950, as amended, Executive Order 10161, and Economic Stabilization Agency General Order 2, Delegation of Authority by the Secretary of Agriculture to the Economic Stabilization Agency with respect to meat, as amended, and Economic Stabilization Agency General Order 5, Revision, this Amendment 1 to Ceiling Price Regulation 129 is hereby issued.

STATEMENT OF CONSIDERATIONS

1. This amendment removes the prohibition against selling, transferring, or buying sausage containing horsemeat, heretofore contained in section 12 (d) (4) of CPR 129. This prohibition was originally incorporated in the regulation to protect the buying public from deception and also to prevent evasion of this regulation by means of adulteration of higher priced sausage items with low cost horsemeat.

However, since the issuance of CPR 129 it has come to the attention of the Office of Price Stabilization that there are manufacturers who have historically made and sold this type of product. These manufacturers have a substantial investment in specialized equipment and would suffer hardship unless the prohibition is relaxed as to them. This amendment therefore adds a new section 15 which permits the continuance of their historical practices, subject to the condition that the sausage product be so labeled as to show clearly that it contains horsemeat. Because of the lack of data necessary to determine dollar-and-cents ceiling prices for such horsemeat sausage, this amendment provides that their ceiling prices are established under the General Ceiling Price Regulation.

2. Moreover, the new section 15 added by this amendment also permits the sale of certain frozen packaged meat products containing horsemeat, subject to certain limitations and reporting requirements. These items are sold mostly as pet food. Ceiling prices for these packaged products are also established by the General Ceiling Price Regulation. This amendment also fixes specific percentage mark-ups for nonprocessing distributors of these frozen packaged items, based upon the best available data concerning the historical margins enjoyed by this segment of the trade. Current information indicates that a wholesaler's mark-up of 15 percent and a retailer's mark-up of 27 percent adequately reflect these margins.

3. This amendment also makes the following further changes and additions: New ceiling prices are established for ground horsemeat packed in containers ranging in size from one to five pounds, to reflect more accurately the cost of these containers. The ceiling prices for lungs and melts have been changed to reflect more nearly the prices historically charged for these items by a substantial segment of the trade. Moreover, ceiling prices for kidneys are established for the first time. An additional allowance is permitted unaffiliated wholesalers, to rectify the omission of a wholesaler's mark-up in CPR 129, as originally issued. It reflects the best currently available data concerning historical margins enjoyed by this class of seller. New retail ceiling prices for ground and boneless horsemeat are established, to reflect this allowance of a wholesaler's mark-up. Retail ceiling prices of bone-in cuts of horsemeat remain unchanged, since they are already adequate to reflect fair and

equitable margins for both wholesalers and retailers. An allowance has been authorized for sales of horsemeat by brokers.

In formulating this amendment, the Director of Price Stabilization has consulted with industry representatives including trade association representatives, to the extent practicable under the circumstances, and has given full consideration to their recommendations. In his judgment the provisions of this amendment comply with all of the applicable standards of the Defense Production Act of 1950, as amended.

AMENDATORY PROVISIONS

Ceiling Price Regulation 129 is amended in the following respects:

1. Section 12 (d) (4) is amended to read as follows:

(4) Any sausage or frozen packaged meat product, containing horsemeat, which does not comply with the requirements of section 15 (d) of this regulation.

2. A new section 15 is added to read as follows:

SEC. 15. *Ceiling prices for sausage and frozen packaged meat products, containing horsemeat.* (a) If you manufacture a sausage or frozen packaged meat product, containing horsemeat, (other than those items specifically listed in Article II of this regulation), your ceiling price for any such item is established by the General Ceiling Price Regulation.

(b) If you are a non-processing wholesaler of a sausage or frozen packaged meat product, containing horsemeat, you determine your ceiling price for any such item by multiplying your net invoice cost by 1.15. See section 30 (k) for definition of "wholesaler" and section 30 (l) for definition of "net invoice cost."

(c) If you are a non-processing seller at retail of a sausage or frozen packaged meat product, containing horsemeat, you determine your ceiling price for any such item by multiplying your net invoice cost by 1.27. See section 30 (l) for definition of "net invoice cost."

(d) You must not sell a sausage or frozen packaged meat product, containing horsemeat, unless each such item is clearly marked to show that it contains horsemeat. The word "Horsemeat", in letters sufficiently large to be clearly legible, must appear as follows:

(1) In the case of sausage containing horsemeat, the word "horsemeat" must appear—

(i) On a tag or label securely fastened to the product or on the casing, if the sausage item weighs one pound or more per unit.

(ii) On a band encircling each item which weighs less than one pound per unit.

(2) In the case of frozen package horsemeat products priced under this section 15 the word "horsemeat" shall appear on the package or wrapper, along with the following:

(i) a description of the ingredients, including the percentage of horsemeat contained in the product;

(ii) the name of the product;

(iii) the net weight of the contents of the package;

(iv) the name and address of the processor or manufacturer; and

(v) a blank space where the retail price shall be clearly marked by the retailer.

All labels, tags, bands, or descriptions required by this section must be left on sausage or frozen packaged items and be on such items when they are delivered to an ultimate consumer.

(e) If you are a manufacturer of a sausage or frozen packaged meat product, containing horsemeat, to whom this section 15 applies you must not sell such item until you have sent, by registered mail, to the Meat and Fish Branch, Office of Price Stabilization, Washington 25, D. C., a signed report containing the following information:

1. Your name;
2. Your business address;
3. The type or types of customers to whom you regularly and customarily sell your product;
4. Your ceiling price for each such sausage or frozen packaged item under the General Ceiling Price Regulation;
5. The percentage by weight and the cost of each ingredient which goes into the finished product.

(f) The Director of Price Stabilization may, at any time, issue an order forbidding any manufacturer, processor, or distributor of any item covered by this section 15 to sell any such item; or he may, at any time, issue an order revising the ceiling price of any seller of any such item.

3. Section 20, Schedule I, is amended by deleting Items 5, 6, 10, 11, and 12, and substituting therefor the following new Items 5, 6, 10, 11, and 12, and by adding a new Item 15 to read as follows:

	Inspected		Uninspected	
	Zones 1 and 3	Zone 2	Zones 1 and 3	Zone 2
5. Ground horsemeat (bone-in):				
a. 1 pound or less (packaged)	$15	$13	$13	$11
b. Over 1 pound but not over 5 pounds (packaged)	14	12	12	10
c. Over 5 pounds (packaged or bulk)	13	11	11	9
6. Ground horsemeat (boneless):				
a. 1 pound or less (packaged)	17	15	15	13
b. Over 1 pound but not over 5 pounds (packaged)	16	14	14	12
c. Over 5 pounds (packaged or bulk)	15	13	13	11
10. Hearts	15	13	13	11
11. Livers:				
a. Bulk	17	15	15	13
b. 5 pounds or less (packaged)	18	16	16	14
12. Lungs and melts	10	10	10	10
15. Kidneys	15	13	13	11

4. Item 1 under Special Adjustments for Schedule I is amended to read as follows:

1. For sales by a slaughterer to a retailer you may add $2.00 per hundredweight to the ceiling prices specified above. If you are a wholesaler you may add $3.00 per hundredweight to the ceiling prices specified above. See section 30 (k) for definition of "wholesaler".

5. Item 2 under Special Adjustments for Schedule I is amended to read as follows:

2. For sales of horsemeat packed in non-returnable containers, you may add the actual cost of the packing container to the ceiling prices specified above (except for sales of Item 7, above, cured boneless horsemeat), but in no case may you add more than $1.00 per hundredweight. For horsemeat packed in returnable metal containers you may add $0.50 per hundredweight to the ceiling prices specified above.

6. A new Item 5 is added under Special Adjustments for Schedule I, to read as follows:

5. If you are a wholesaler in Zone 2, you may add the lowest carload freight (adjusted to the nearest 10¢ per cwt.), for an intra-zone shipment from the slaughtering plant to your place of business, if actually incurred, to the ceiling prices specified above. Your invoice must show this freight as a separate item.

7. A new Item 6 is added under Special Adjustments for Schedule I to read as follows:

6. On sales by brokers you may add $0.25 per hundredweight to the ceiling prices specified above.

8. Section 21, Schedule II, is amended to read as follows:

SCHEDULE II—SALES AT RETAIL

[All prices are on a cents-per-pound basis. The price for any fraction of a pound shall be reduced proportionately]

	Inspected		Uninspected	
	Zones 1 and 3	Zone 2	Zones 1 and 3	Zone 2
1. Bone-in cuts	$0.26	$0.23	$0.23	$0.20
2. Boneless cuts	.33	.31	.31	.28
3. Ground (bone-in)	.25	.23	.23	.21
4. Ground (boneless)	.30	.27	.27	.24
5. Tenderloins	.45	.42	.42	.40
6. Brains	.14	.14	.14	.14
7. Hearts	.26	.24	.24	.22
8. Livers	.28	.26	.26	.24
9. Tongues	.20	.20	.20	.20
10. Kidneys	.26	.25	.25	.24

9. Section 22, Schedule III, is amended to read as follows:

SCHEDULE III—SALES BY PROCESSORS

[Listed prices are for a case of 48 1-pound cans or jars. Cases having more or less than 48 units or having units of more or less than 1 pound must be adjusted accordingly]

	Inspected		Uninspected	
	Zones 1 and 3	Zone 2	Zones 1 and 3	Zone 2
1. Containing 97 percent horsemeat or more (as defined in sec. 32)	$10.60	$9.60	$9.60	$8.60
2. Containing 80 percent or more, but less than 97 percent horsemeat	8.10	7.30	7.30	6.50
3. Containing 30 percent or more, but less than 80 percent horsemeat	6.70	6.10	6.10	5.50
4. Containing 5 percent or more, but less than 30 percent horsemeat	4.80	4.60	4.60	4.40
5. Horsemeat and gravy, containing 80 percent or more horsemeat	8.50	7.60	7.60	6.70

10. A new section 30 (k) is added to read as follows:

(k) "Wholesaler" means a seller of horsemeat who does not own, control, or have any interest in a slaughtering plant or slaughtering facilities used for the commercial killing of horses, and who is not wholly or partly owned or controlled by any person who owns or controls or has any interest in any such slaughtering plant or facilities.

11. A new section 30 (l) is added to read as follows:

(l) "Net invoice cost" as used in this regulation means the cost shown on the invoice furnished you by your supplier, less all discounts except the discount for prompt payment, plus all transportation charges paid by you, which may include cost of icing, refrigeration and ventilation but which may not include costs of local trucking or local unloading.

12. Section 32 (b) is amended to read as follows:

(b) "Boneless horsemeat" means edible skeletal horsemeat from which all bones have been removed.

13. Section 32 (n) is amended to read as follows:

(n) "Horsemeat" means skeletal meat derived from the horse carcass.

14. A new section 32 (u) is added to read as follows:

(u) "Canned horsemeat containing 97 percent horsemeat or more" means a canned horsemeat product containing at least 97 percent of edible skeletal horsemeat.

(Secs. 701 and 704, 64 Stat. 816, as amended; 50 U. S. C. App. Sup. 2154)

Effective date. This amendment shall become effective May 19, 1952.

NOTE: The reporting and record-keeping requirements of this amendment have been approved by the Bureau of the Budget in accordance with the Federal Reports Act of 1942.

ELLIS ARNALL,
Director of Price Stabilization.

MAY 14, 1952.

[F. R. Doc. 52-5485; Filed, May 14, 1952; 12:03 p. m.]

[General Ceiling Price Regulation, Interpretation 55]

GENERAL CEILING PRICE REGULATION

INT. 55—PARITY ADJUSTMENT BY DISTRIBUTOR MAY BE BASED ONLY UPON LAWFUL COST INCREASE (SECTION 11 (C))

Under section 11 (c) of the GCPR the distributor of a listed agricultural commodity, or of a product processed therefrom, may make a parity adjustment in his ceiling price where the cost to him of a current customary purchase of that commodity exceeds the highest price he paid for it during the base period. The question has arisen whether such a parity adjustment by the distributor may be based upon an illegal price increase by his supplier.

The term "cost" as used in section 11 (c) (2) means lawful cost, and refers only to a price paid by the distributor to his supplier which does not exceed the supplier's lawful ceiling price. Accordingly, the distributor under section 11 (c) (2) may increase his section 3 ceiling price only by the difference between the highest price paid by him for a customary purchase during the base period and the lawful price paid by him for his most recent customary purchase. Any charge in excess of the price thus computed would constitute a violation of the GCPR.

(Sec. 704, 64 Stat. 816, as amended; 50 U. S. C. App. Sup. 2154)

HERBERT N. MALETZ,
Chief Counsel,
Office of Price Stabilization.

MAY 14, 1952.

[F. R. Doc. 52-5486; Filed, May 14, 1952; 12:03 p. m.]

Chapter VI—National Production Authority, Department of Commerce

[NPA Order M-25, as Amended May 14, 1952]

M-25—CANS

This amended order is found necessary and appropriate to promote the national defense and is issued pursuant to the Defense Production Act of 1950, as amended. In the formulation of this amended order there has been consultation with industry representatives, including trade association representatives, and consideration has been given to their recommendations. However, consultation with representatives of all trades and industries affected by the issuance of this amended order has been rendered impracticable because the amended order affects a very substantial number of different trades and industries.

This amended order constitutes a complete revision of NPA Order M-25 as amended January 22, 1952, and as further amended by Amendment 1 thereto, issued March 13, 1952. Direction 2 to NPA Order M-25, issued December 12, 1951, and Direction 3 to NPA Order M-25, issued December 29, 1951 (effective January 1, 1952), remain in full force and effect.

Sec.

AUTHORITY: Sections 1 to 14 issued under sec. 704, 64 Stat. 816, Pub. Law 96, 82d Cong.; 50 U. S. C. App. Sup. 2154. Interpret or apply sec. 101, 64 Stat. 799, Pub. Law 96, 82d Cong.; 50 U. S. C. App. Sup. 2071; sec. 101, E. O. 10161, Sept. 9, 1950, 15 F. R. 6105; 3 CFR, 1950 Supp; sec. 2, E. O. 10200, Jan. 3, 1951, 16 F. R. 61; 3 CFR, 1951 Supp.; secs. 402, 405, E. O. 10281, Aug. 28, 1951, 16 F. R. 8789; 3 CFR, 1951 Supp.

SECTION 1. *What this order does.* This order places restrictions upon the acceptance of, the delivery of, and the uses of cans. Schedule I sets out required plate specifications which vary according to the products packed. NPA Order M-24 permits the use of tin plate and terneplate for cans in accordance with the terms of this order. NPA Order M-8 sets forth specifications for solder that may be used in the manufacture of cans. Under the Controlled Materials Plan (CMP), allotments of tin plate, terneplate, and black plate are made to can manufacturers for the production of cans.

SEC. 2. *Definitions.* As used in this order:

(a) "NPA" means the National Production Authority.

(b) "Can" means any unused container made in whole or in part of tin plate, terneplate, or black plate, which is suitable for packing any product. The term includes any container which has a closure or fitting made in whole or in part of tin plate, terneplate, or black plate, but does not include a glass container having such a closure or fitting. The term does not include fluid milk shipping containers, nor crown closures for cone-topped cans.

(c) "Person" means any individual, corporation, partnership, association, or any other organized group of persons, and includes any agency of the United States Government or of any other government.

(d) "Packer" means any person who either (1) purchases or manufactures empty cans and fills such cans in packing any product, or (2) purchases empty cans and has them filled for his account by another party, but who controls sale and distribution of the finished product after packing.

(e) "Tin plate" means steel sheets coated with tin, and includes electrolytic tin plate, hot-dipped tin plate, primes, seconds, unassorted, tin plate waste-waste, menders, unmended menders, and unassorted temper tin plate. Tin plate (except waste-waste) is furnished as "specification production plate" or "mill accumulation plate," and each such class includes primes, seconds, and unassorted. Specification production plate is plate produced against orders for specific end uses. Mill accumulation plate is plate arising in the production of specification production plate not applicable against such orders.

(f) "Terneplate" means steel sheets coated with terne metal, and includes special coated manufacturing ternes (SCMT), manufacturing ternes, primes, seconds, unassorted, and terneplate waste-waste.

(g) "Waste-waste" means hot-dipped or electrolytic tin-coated steel sheets or steel sheets coated with terne metal which have been rejected during processing by the producer because of imperfections which disqualify such sheets from sale as primes, seconds, or unassorted.

(h) "Unmended menders" means tin-coated steel sheets arising in the production of electrolytic tin plate which have been set aside by the producer by reason of surface appearance which disqualifies such sheets from sale as primes, seconds, or unassorted.

(i) "Menders" means tin-coated steel sheets arising in the production of electrolytic tin plate which have been set aside by the producer by reason of surface appearance which disqualifies such sheets from sale as primes, seconds, or unassorted, and mended either into coke tin plate primes, seconds, or unassorted by hot-dipping in tin; or into primes, seconds, or unassorted terneplate by hot-dipping in terne metal.

(j) "Unassorted temper tin plate" means primes, seconds, or unassorted tin plate, arising in the production of hot-dipped or electrolytic tin plate, which has been packaged without regard to temper.

(k) "Waste" means protective sheets and lacquered or lithographed misprint sheets of tin plate, terneplate, or blackplate, and includes scrap such as strips and circles produced in the ordinary course of manufacturing cans, and tin plate strips, terneplate strips, or black plate strips, produced in the ordinary course of manufacturing tin plate, terneplate, or black plate. The term also includes tin plate, terneplate, or black plate parts recovered from used cans.

(l) "Black plate" means steel sheets (other than tin plate or terneplate) 29-gage (128 pounds) or lighter. The term includes can manufacturing quality black plate (CMQ), chemically treated black plate (CTB), primes, seconds, and unassorted.

(m) "Black plate rejects" means black plate 29-gage (128 pounds) or lighter, which has been rejected during processing by the producer because of imperfections which disqualify such black plate from sale as primes, seconds, or unassorted, and which has been segregated as to gage and size.

(n) "Black plate wasters" means black plate 29-gage (128 pounds) or lighter, which has been rejected during processing by the producer because of imperfections which disqualify such black plate from sale as primes, seconds, or unassorted, and which has been segregated as to gage but not as to size.

(o) "Black plate waste-waste" means black plate 29-gage (128 pounds) or lighter, which has been rejected during processing by the producer because of imperfections which disqualify such black plate from sale as primes, seconds, or unassorted, and which has not been segregated as to either gage or size.

SEC. 3. *Restrictions on use of cans.* Subject to the exceptions set forth in section 9 of this order, no person shall use cans for any purpose other than for packing a product listed in Schedule I in accordance with the groupings, the quota percentage limitations, and the can material specifications set out in Schedule I appearing at the end of this order.

SEC. 4. *Restrictions on manufacture, sale, and delivery of cans.* No person shall manufacture, sell, or deliver cans which he knows or has reason to believe will be accepted or used in violation of the terms of this order or any other order or regulation of NPA. No person shall sell or deliver empty cans which he knows or has reason to believe will be exported outside of the continental limits of the United States, its territories and possessions (unless such export is to Canada) except as permitted under section 9 (d) of this order.

SEC. 5. *Restrictions on quantity of cans that may be accepted.* No person shall accept delivery of any cans at a time when his inventory thereof exceeds, or by acceptance of such delivery would be made to exceed, a practicable minimum working inventory of cans, as defined in NPA Reg. 1, as now in force or as hereafter amended.

SEC. 6. *Restrictions on quantity of cans that may be used for packing.* (a) Commencing with the first calendar quarter of 1952, a packer shall select either the calendar year 1949 or the calendar year 1950 as the packing base period on the basis of which he shall predicate and compute his permitted usage of cans for packing each product which he packs. He may select either 1949 or 1950 for any particular product, but he must thereafter, until otherwise ordered, directed, or authorized by NPA, continue to use the base year so selected for a particular product as the basis for predicating and computing his permitted can usage for packing that product.

(b) During the second calendar quarter of 1952 and each subsequent calendar quarter of 1952, no person, unless otherwise authorized by NPA, or except as provided in paragraph (d) of this section, may use cans for packing any particular product listed in Schedule I of this order in excess of a quota of cans determined by applying the percentage listed in column (2) of Schedule I opposite the particular product to the amount of cans which he used for packing that particular product during the corresponding quarter of his selected base year.

(c) The term "amount of cans" as used in this order with respect to packing a particular product during a particular calendar quarter of a packer's selected base year means the total area of tin plate, terneplate, and black plate (including the total area of tin plate waste, terneplate waste, black plate rejects, black plate waste-waste, black plate wasters, and black plate waste) used in the manufacture of the cans and parts of cans which the packer used for packing that product during that quarter.

(d) If, for packing any product during the second or any succeeding calendar quarter of 1952, a packer uses cans or parts of cans having a tin-coating lighter than that specified for that product in Schedule I, he may use for packing that product, during the same or any succeeding calendar quarter or quarters of 1952, an additional quantity of cans to the extent that he does not exceed the total tin usage (by weight of tin) as established by the tin specifications listed for that product in Schedule I and by computation of his quota for that product under paragraph (b) of this section.

(e) Where the word "unlimited" appears in column (2) of Schedule I opposite a particular product, a packer may use the specified cans in an unlimited quantity to pack that particular product, subject to the inventory restrictions contained in section 5 of this order. Where a quota percentage appears in column (2) of Schedule I opposite a particular product, and a packer uses less than the limited quota of cans permitted for packing that particular product during any calendar quarter of 1952, he may, unless otherwise directed by NPA, use the unused quantity for packing that particular product during any succeeding calendar quarter or quarters of 1952. Nothing in this paragraph shall be construed as permitting a packer to use, after December 31, 1951, any carry-over quota or quotas attributable to any calendar quarter of 1951, or any part or parts of any such quota or quotas.

(f) No packer may assign, transfer, or surrender, to or for the benefit of any other person, his permissible can quota or quotas for any calendar quarter, or any part or parts of any such quota.

(g) In certain instances column (2) of Schedule I of this order authorizes one quota for packing a particular product in cans of a larger size or sizes and a different quota for packing such product in cans of smaller size or sizes. In such instances, the packer's base-period usage for packing that product in cans of larger size or sizes determines his permitted base for packing such product in such larger size or sizes, and his base-period usage for packing such product in cans of smaller size or sizes determines his permitted base for packing such product in such smaller size or sizes.

SEC. 7. *Adjustments under Direction 3.* Packers may adjust their own quarterly quotas in accordance with the provisions of Direction 3 of this order, as issued December 29, 1951, or as from time to time hereafter amended.

SEC. 8. *Restrictions on can manufacturers.* So far as practicable, every can manufacturer shall schedule his operations (including his ordering of tin plate, terneplate, and black plate) so as to insure delivery of all rated orders bearing a program identification consisting of the letter A, B, C, or E, and one digit, and any other orders under NPA directives.

SEC. 9. *Exceptions*—(a) *Small business.* (1) Any person who, during 1949 or 1950, purchased cans for packing and

not for resale and who used such cans for packing, but whose total use of cans for packing all products during each of those years was not more than 250 base boxes of tin plate and terneplate, may purchase and use for packing in any calendar year, irrespective of the quota limitations in this order, but in accordance with the can material specifications in Schedule I, a total quantity of cans equivalent to not more than 250 base boxes of tin plate and terneplate. This exemption does not apply to any person who buys empty cans or parts thereof and sells such empty cans or parts thereof to a packer.

(2) During the second or any succeeding calendar quarter of 1952, any packer having only one line of equipment for packing all of his products in cans may use, for packing all such products, sufficient cans to utilize such facilities for the equivalent of twenty-six 8-hour shifts in each such calendar quarter.

(3) The use limitations of section 6 of this order and the can material specifications in Schedule I do not apply to cans used to pack any product in home canning, community canning, or institutional (meaning such institutions as prisons, vocational schools, and mental hospitals) canning where the product is not to be sold. This exception also applies to cans for packing laboratory samples and control samples, but not to cans for packing samples distributed for the purpose of advertising or for promoting the sale of a product, or to any cans used for packing products which are later repacked and sold.

(b) *Can materials.* (1) The can material specifications and the quantity usage limitations of this order do not apply to cans or parts of cans made entirely of any of the following materials or entirely of any combination thereof:

Tin plate waste-waste.
Tin plate waste.
Terneplate waste-waste.
Terneplate waste.
Black plate.
Black plate rejects.
Black plate waste-waste.
Black plate wasters.
Black plate waste.

(2) The can material specifications and the quantity usage limitations of this order do not apply to fiber body cans having other parts made of any material or materials defined in section 2.

(c) *Defense requirements.* (1) Rated orders bearing a program identification consisting of the letter A, B, C, or E, and one digit, are exempt from the restrictions in sections 5 and 6 of this order on the quantity of cans that may be accepted and used.

(2) The use of cans for packing any product which is required to be packed in cans, set aside, and reserved for purchase by any authorized Government agency under the United States Department of Agriculture Set-Aside Program is exempt from the quantity usage limitations of this order, but not from the can material specifications of Schedule I: *Provided, however,* That there may be used, for all or any part of a packer's pack of any such set-aside product, 0.50 electrolytic tin plate for those soldered or nonsoldered parts of No. 10 cans for which 0.25 electrolytic tin plate is specified in Schedule I, when outside enamel is not provided for such parts.

(3) The can material specifications set out in Schedule I of this order shall not apply to rated orders bearing a program identification consisting of the letter A, B, C, or E, and one digit, and requiring the packing of products in accordance with military or Federal specifications for the Department of Defense for use outside the 48 States of the United States and the District of Columbia by the Armed Forces of the United States, including the United States Coast Guard.

(4) The restrictions of this order shall not apply to military requirements for cans of a special design or style not normally produced or used commercially, or to cans for emergency rations and supplies for lifeboats.

(d) *Export.* The provisions of this order shall not apply to the sale or delivery of empty cans where the person selling or delivering the same has received a validated export license therefor from the Office of International Trade, or has received from another person a certificate signed manually. This certificate shall be by letter in substantially the following form (the inapplicable words stricken therefrom), shall constitute a representation to the seller and to NPA, and shall be filed with each purchase order with the person selling or delivering to such other person cans for export:

To _____, seller: The undersigned purchaser certifies, subject to criminal penalties, that (he has received a certification from another person that) the Office of International Trade has issued to (him) (such other person) validated export license No. _____ for export shipment of all of the items included in the attached purchase order, and that all purchases from you of items included in the said purchase order and the acceptance of the same will be in compliance with the said validated export license.

In cases of export to those countries where the Office of International Trade does not require an export license, no certificate shall be required until such time as an export license is required by the Office of International Trade.

(e) *Special allotments of can materials.* As used in this paragraph the terms "allotment," "controlled materials," and "authorized production schedule" shall have the same meanings as in CMP Regulation No. 1. If the allotment or any supplemental allotment of controlled materials made to a can manufacturer for the first or second calendar quarter of 1952 includes in express terms a specified weight of mill accumulation plate, tin plate waste-waste, unmended menders, unassorted temper tin plate, or "other coated secondaries" (as defined in NPA Order M-24, as amended), for use by him in fulfilling his authorized production schedule, then, to the extent that he orders and accepts delivery of any such secondary material and to the extent that he manufactures cans or parts of cans or both made entirely therefrom, he shall offer such cans and parts of cans so manufactured, or an equivalent quantity of cans, among his customers on a pro rata basis. If, upon the first or any subsequent offering, any customer fails to order any cans or parts of cans representing his pro rata share, the cans and parts of cans so unordered also shall be offered by the can manufacturer among his remaining customers on a pro rata basis. The can manufacturer shall deliver to each purchaser of any cans or parts of cans supplied under this paragraph a certificate reading substantially as follows:

Certified for use in accordance with section 9 (e) of NPA Order M-25.

Any packer purchasing any cans or parts of cans so certified may use the same, or an equivalent quantity of cans, during any calendar quarter or quarters of 1952 for packing any product irrespective of the quota percentage limitations and the can material specifications of this order.

SEC. 10. *Certification of delivery of cans.* No manufacturer, jobber, or distributor shall sell or deliver cans unless he has received from the purchaser a certificate signed manually. This certificate shall be by letter in substantially the following form, shall constitute a representation to the seller and to NPA, and, once filed by a purchaser with a manufacturer, jobber, or distributor, shall cover all future deliveries of cans from the manufacturer, jobber, or distributor to that purchaser:

To _____, manufacturer, jobber, or distributor: The undersigned purchaser certifies, subject to criminal penalties, that he is familiar with Order M-25 of the National Production Authority, and that all purchases from you of items regulated by that order, and the acceptance and use of the same by the undersigned, will be in compliance with said order, and any amendments thereto.

SEC. 11. *Request for adjustment or exception.* Any person affected by any provision of this order may file a request for adjustment or exception upon the ground that his business operation was commenced during or after the base period, that any provision otherwise works an undue or exceptional hardship upon him not suffered generally by others in the same trade or industry, or that its enforcement against him would not be in the interest of the national defense or in the public interest. In examining requests for adjustment or exception claiming that the public interest is prejudiced by the application of any provision of this order, consideration will be given to the requirements of the public health and safety, civilian defense, and dislocation of labor and resulting unemployment that would impair the defense program. Each request shall be in writing, submitted on Form NPAF-38, in tripli-

cate, and shall set forth all pertinent facts, the nature of the relief sought, and the justification therefor. Form NPAF-38 must be executed as therein required. A packer who requires cans for a new product he desires to pack may file a request on Form NPAF-38 with NPA for consideration in establishment of a can quota.

SEC. 12. *Records and reports.* (a) Each person participating in any transaction covered by this order shall make and preserve, for at least 3 years thereafter, accurate and complete records of receipts, deliveries, inventories, production, and use, in sufficient detail to permit the determination, after audit, whether each transaction complies with the provisions of this order. This order does not specify any particular accounting method and does not require alteration of the system of records customarily used, provided such records supply an adequate basis for audit. Records may be retained in the form of microfilm or other photographic copies instead of the originals by those persons who, at the time such microfilm or other photographic records are made, maintain such copies of records in the regular and usual course of business.

(b) All records required by this order shall be made available for inspection and audit by duly authorized representatives of the National Production Authority, at the usual place of business where maintained.

(c) Persons subject to this order shall make such records and submit such reports to the National Production Authority as it shall require, subject to the terms of the Federal Reports Act of 1942 (5 U. S. C. 139–139F).

SEC. 13. *Communications.* All communications concerning this order shall be addressed to the National Production Authority, Washington 25, D. C., Ref: NPA Order M-25.

SEC. 14. *Violations.* Any person who wilfully violates any provision of this order, or any other order or regulation of NPA, or who wilfully furnishes false information or conceals any material fact in the course of operation under this order, is guilty of a crime and upon conviction may be punished by fine or imprisonment or both. In addition, administrative action may be taken against any such person to suspend his privilege of making or receiving further deliveries of materials or using facilities under priority or allocation control and to deprive him of further priorities assistance.

NOTE: All reporting and record-keeping requirements of this order have been approved by the Bureau of the Budget in accordance with the Federal Reports Act of 1942.

Schedule I is hereto attached and made a part of this order.

Except as otherwise provided herein, this amended order shall take effect May 14, 1952.

NATIONAL PRODUCTION AUTHORITY,
By JOHN B. OLVERSON,
Recording Secretary.

SCHEDULE I OF NPA ORDER M-25—CAN SPECIFICATIONS

Columns (3) and (4) specify the weight in pounds of coating per base box of tin plate or terneplate which may be used for the parts of cans for the products listed in column (1). Any packer may also use for packing a listed product, black plate cans or cans with a tin-coating lighter than that specified for that product. Wherever 0.25 electrolytic tin plate is specified, SCMT may be used. Tin plate menders arising in the production of electrolytic tin plate may be used only where hot-dipped tin plate is permitted in this schedule. When only a figure is given in columns (3) and/or (4), this means that tin plate may be used for the part, and the figure given indicates the maximum weight in pounds of tin-coating on each base box of plate. Electrolytic 0.25 tin plate may be used in place of black plate in that part of a can which, after filling, is required to be hermetically closed by soldering, or in that part of a can to which a nozzle is required to be attached by soldering. Nozzles and fittings so attached may also be made of 0.25 electrolytic tin plate, except that 0.50 electrolytic tin plate may be used for drawn soldered fittings. Electrolytic 0.25 tin plate may also be used for drawn fittings which are not required to be attached by soldering.

Product	Grouping and quota percentages			Can materials	
				Soldered or welded parts	Non-soldered parts
(1)	(2)			(3)	(4)
Fruit and fruit products	*Group I*	*Group II*	*Group III*		
1. Apples, all types, quartered and sliced	Unlimited			1.25	0.50
2. Apple juices, all types, single strength		100			
Enameled cans				1.50	1.50
Plain bodies				1.25	.50
3. Apple cider			90		
Enameled cans				1.50	1.50
Plain bodies				1.25	.50
4. Apple sauce	Unlimited			1.25	.50
5. Apricots, whole or halves	Unlimited			1.25	.50
6. Bananas and banana pulp (except dehydrated)			90	1.25	.50
7. Berries	Unlimited				
Blueberries and huckleberries:					
Enameled cans				1.50	1.50
Plain bodies				1.50	.50
Cranberries, whole or sauce				1.50	1.50
Gooseberries				1.25	.50
All other berries				1.50	1.50
8. Cherries, dark sweet	Unlimited			1.50	1.50
9. Cherries, light sweet	Unlimited			1.25	.50
10. Cherries, maraschino			90	1.50	1.50
11. Cherries, red sour	Unlimited			1.50	1.50
12. Currants, including juice:					
No. 10 cans and larger	Unlimited				
Smaller than No. 10 cans			90		
Enameled cans				1.50	1.50
Plain bodies				1.25	.50
13. Figs	Unlimited			1.25	.50
14. Fruitade-base concentrates	Unlimited				
Frozen				.25	.25
Processed				1.50	1.50
15. Fruitades, ready to drink			90		
Berryades				1.50	1.50
All others				1.25	1.25
16. Fruits, baked		100			
Enameled cans				1.50	1.50
Plain bodies				1.50	.50
17. Fruit cocktail and mixed fruits				1.25	.50
Direct pack (except that canned pineapple and canned maraschino cherries may be used)	Unlimited				
Repacked from metal cans where fruits other than canned pineapple and canned maraschino cherries are used			90		
18. Fruit butters:					
No. 10 cans and larger		100			
Smaller than No. 10 cans			90		
Apple butter:					
Enameled cans				1.50	1.50
Plain bodies				1.50	.50
All other fruit butters				1.50	1.50
19. Fruit concentrate	Unlimited				
Apricots				1.50	.50
Other fruits				1.25	.50
20. Fruits, dehydrated or dried (except prunes)		100			
5-gallon square cans				.50	.50
Other can sizes				.25	.25
21. Fruits, frozen, all varieties	Unlimited			.25	.25
22. Fruit jams, jellies, marmalades, and preserves:					
No. 10 cans and larger		100			
Smaller than No. 10 cans			90		
Light color				1.25	.50
Dark color				1.50	1.50
23. Fruit juices, concentrate	Unlimited				
Frozen, all varieties and blends				.25	.25
Processed grapefruit and grapefruit juice blends				1.25	1.25
All other fruit juice concentrates, processed				1.50	1.50
24. Fruit juices, single strength (except apple):					
Citrus, pineapples, and blends	Unlimited				
Processed				1.25	1.25
Frozen				.25	.25
Grape juice:					
5-gallon cans and larger	Unlimited			1.25	1.25
Smaller than 5-gallon			90	1.25	1.25
Prune juice		100		1.50	1.50
All other single-strength fruit juices		100		1.50	1.50
25. Fruit nectars:					
Direct pack		100			
Repacked from metal cans			90		
Light-colored fruits				1.25	.50
Dark-colored fruits				1.50	1.50

SCHEDULE I OF NPA ORDER M-25—CAN SPECIFICATIONS—Continued

Product (1)	Grouping and quota percentages (2)			Can materials	
				Soldered or welded parts (3)	Non-soldered parts (4)
Fruit and fruit products—Continued	*Group I*	*Group II*	*Group III*		
26. Fruit pulp and purees (except baby food)	Unlimited			Same as nonpureed fruits	
27. Fruit salad				1.25	0.50
Direct pack (except that canned apricots, canned pineapple, and canned maraschino cherries may be used)	Unlimited				
Repacked from metal cans, where fruits other than canned apricots, canned pineapple, and canned maraschino cherries are used			90		
28. Fruits, spiced:			90		
Crab apples					
Enameled cans				1.50	1.50
Plain bodies				1.50	.50
All others			90	1.50	.50
29. Grapes, processed:					
Colored—all can sizes			90	1.50	1.50
Thompson, seedless				1.25	.50
No. 10 cans and larger		100			
Smaller than No. 10 cans			90		
Spiced Thompson seedless			90	1.50	1.50
30. Grapefruit and orange segments	Unlimited			1.25	1.25
31. Grapefruit segments	Unlimited			1.25	1.25
32. Nectarines	Unlimited			1.25	.50
33. Olives, whole or chopped:					
Green ripe	Unlimited			1.25	1.25
Green			90	1.50	1.50
Ripe	Unlimited				
Enameled cans				1.50	1.50
Plain bodies				1.50	.50
34. Orange segments		100		1.25	1.25
35. Papayas and papaya products		100		1.25	1.25
36. Peaches, whole, halves, quarters, sliced, and diced	Unlimited			1.25	.50
37. Pears, whole, halves, quarters, sliced, and diced	Unlimited			1.25	.50
38. Pectin, liquid		100		1.50	1.50
39. Pie and pastry filler (fruit filling only):					
Direct pack (including frozen)		100			
Repack from metal cans (one or more components)			90		
Enameled cans				1.50	1.50
Plain bodies				1.25	.50
Other than fruit fillings			90	.25	.25
40. Pineapple	Unlimited			1.25	1.25
41. Plums	Unlimited				
Light-colored				1.25	.50
Dark-colored				1.50	1.50
42. Prunes, dehydrated or dried		100		1.25	.50
43. Prunes, dried in syrup		100		1.50	1.50
44. Prunes, fresh in syrup	Unlimited			1.50	1.50
Vegetables and vegetable products					
45. Asparagus	Unlimited			1.25	1.25
46. Beans, dry, soaked, all varieties	Unlimited				
With sweetened sauce (Boston style)				.25	.25
With chili sauce				.50	.50
With plain sauce or brine				.25	.25
With tomato sauce				1.25	.25
47. Beans, fresh-shelled	Unlimited			.25	.25
48. Beans, green and wax	Unlimited			1.25	.25
49. Beets	Unlimited			1.25	1.25
50. Beet juice			90	1.25	1.25
51. Beets, pickled			90	1.50	1.50
52. Broccoli			90	1.25	.25
53. Brussell sprouts			90	1.25	.25
54. Carrots	Unlimited			1.25	.25
55. Carrots and peas				1.25	.25
Direct pack	Unlimited				
Repack (either component from metal cans)			90		
56. Carrot juice			90	1.25	1.25
57. Cauliflower			90	1.25	.25
58. Celery		100		1.25	.25
59. Celery juice			90	1.25	1.25
60. Corn, cream style and whole grain	Unlimited			.25	.25
61. Green leafy vegetables	Unlimited				
Leafy or chopped				1.25	.25
Pureed				1.25	1.25
62. Lentils, dried, soaked		100		.25	.25
63. Mushrooms	Unlimited				
Whole, sliced, stems, and pieces				1.25	.25
Broiled in butter				.25	.25
64. Okra, with or without tomatoes	Unlimited			1.25	.25
65. Onions			90	1.25	1.25
66. Peas, all varieties, dry, soaked		100		.25	.25
67. Peas, fresh	Unlimited			.25	.25
68. Peppers and pimientos	Unlimited			1.25	.25
69. Pickles, pickled relishes, and chow-chow				1.50	1.50
No. 10 cans or larger		100			
Smaller than No. 10 cans			90		
70. Potato salad			90	1.25	1.25
71. Potatoes, sweet	Unlimited			1.25	.25
72. Potatoes, white			90	1.25	.25
73. Pumpkin and squash	Unlimited			1.25	1.25
74. Rhubarb			90	1.50	1.50
75. Rutabagas			90	1.25	.25
76. Sauerkraut	Unlimited			1.50	1.50
77. Sauerkraut juice and blends		100		1.50	1.50
78. Succotash				.25	.25
Direct pack	Unlimited				
Repack (one or more components from metal cans)			90		
79. Tomatoes	Unlimited			1.25	.25

SCHEDULE I OF NPA ORDER M-25—CAN SPECIFICATIONS—Continued

Product (1)	Grouping and quota percentages (2)			Can materials	
				Soldered or welded parts (3)	Non-soldered parts (4)
Vegetables and vegetable products—Continued	*Group I*	*Group II*	*Group III*		
80. Tomato products (from fresh tomatoes)	Unlimited				
Tomato catsup, chili sauce, and cocktail sauce:					
Enameled cans				1.25	1.25
Plain bodies				1.25	.26
Tomato juice, aspic, cocktail, and juice blends, containing 70 percent or more tomato juice:					
Enameled cans				1.25	1.25
Plain bodies				1.25	.25
Tomato juice concentrate, frozen:					
5-gallon square cans				.50	.50
Other can sizes				.25	.25
Tomato sauce (including spaghetti), paste, pulp, and puree				1.25	.25
Tomato products (repacked from metal cans):					
Tomato aspic			90	1.25	.25
Catsup, chili sauce, and cocktail sauce		100			
Enameled cans				1.25	1.25
Plain bodies				1.25	.25
Tomato sauce (including spaghetti), paste, pulp, and puree		100		1.25	.25
81. Turnips			90	1.25	.25
82. Vegetables, dehydrated	Unlimited				
5-gallon square cans				.50	CMQ
Other can sizes				CMQ	CMQ
83. Vegetables, frozen	Unlimited				
30-pound and larger				.25	.25
Smaller than 30-pound				.25	.25
Metal ends only					.25
84. Vegetables, mixed				1.25	.25
Containing 70 percent or more vegetables which are not limited to less than 100 percent quota:					
Direct pack from all fresh vegetables	Unlimited				
Repack (one or more components from metal cans)		100			
All other mixtures			90		
Fish and shellfish					
85. Caviar			90	.25	.25
86. Chowder, all varieties	Unlimited				
Inside enameled cans				.25	.25
Plain body cans				1.25	.25
87. Clam juice				.25	.25
1-gallon and larger cans		100			
Other sizes			90		
88. Clams, processed	Unlimited			.25	.25
89. Codfish, salted, dry			90	.25	.25
90. Crab and crabmeat				.25	.25
Deviled		100			
Processed	Unlimited				
91. Crawfish		100		.25	.25
92. Eels			90	.25	.25
93. Finnan haddie		100			
Round cans				.25	.25
Drawn cans				.50	.50
94. Fish and seafood, frozen or refrigerated	Unlimited			.25	.25
95. Fishballs and cakes		100		.25	.25
96. Fish flakes and ground fish for human consumption only, excluding tuna flakes	Unlimited			.25	.25
97. Fish frankfurters		100		.25	.25
98. Fish livers		100			
In reusable 5-gallon square cans				1.25	1.25
In nonreusable 5-gallon square cans and smaller size cans				.50	.50
99. Fish oil		100		.50	.50
100. Fish paste		100		.25	.25
101. Fish, pickled			90	1.50	1.50
102. Fish roe	Unlimited				
In round double-seamed cans				.25	.25
In oval drawn cans				.50	.50
103. Halibut			90	.25	.25
104. Herring, in oil, or brine (including sea and river alewives, anchovies, mackerel, pilchards, and sardines) (1.25 tin plate may be used for scored covers)	Unlimited				
Round cans				.25	.25
¼ drawn cans				.25	.25
¾ 3-piece cans				.50	.50
Oval or oblong drawn (other than ¼ drawn)				.50	.50
105. Herring in tomato or mustard sauce (including sea and river alewives, anchovies, mackerel, pilchards, and sardines in oval, round, oblong, or drawn cans) (1.25 tin plate may be used for scored covers)	Unlimited			.50	.50
106. Lobster, processed or Newburg			90	.25	.25
107. Menhaden			90	.25	.25
108. Mullet		100		.25	.25
109. Mussels, processed		100		.25	.25
110. Oysters, processed	Unlimited			.25	.25
111. Salmon	Unlimited				
In round double-seamed cans				1.25	.25
In oval or drawn cans				.50	.50
112. Scallops, processed		100		.25	.25
113. Shad	Unlimited				
In round double-seamed cans				.25	.25
In oval or drawn cans				.50	.50
114. Shrimp, processed	Unlimited			.25	.25
115. Squid		100			
Enameled cans				.25	.25
Plain bodies				1.25	.25
116. Tuna, including tuna flakes	Unlimited			.25	.25
117. Turtle		100		.25	.25

SCHEDULE I OF NPA ORDER M-25—CAN SPECIFICATIONS—Continued

Product	Grouping and quota percentages			Can materials	
				Soldered or welded parts	Non-soldered parts
(1)	(2)			(3)	(4)
Dairy products	*Group I*	*Group II*	*Group III*		
118. Butter and butter substitutes		100		0.25	0.25
119. Buttermilk, dry			90	CMQ	CMQ
120. Butter oil		100			
5-gallon square cans				.50	.50
Other cans				.25	.25
121. Cheese, cottage, grated or processed		100			
Reusable containers				1.25	1.25
Single trip containers				.25	.25
122. Chocolate and other flavored milk liquids		100		.25	.25
123. Cream:					
Fresh, frozen, or dry:					
5-gallon square cans	Unlimited			.50	.50
Pressure-propellant type cans		100		.25	.25
Other can sizes	Unlimited			.25	.25
Sterilized:					
Pressure-propellant type cans		100		.25	.25
Other cans	Unlimited			.25	.25
124. Goat milk	Unlimited			.25	.25
125. Ice cream:					
All metal cans			90	.25	.25
Fiber body with metal trim	Unlimited				.25
126. Ice cream mix, wet or dry		100		.25	.25
127. Malted and other milk formulations, dry		100			
Domestic				CMQ	CMQ
Export				.25	.25
128. Milk, dry, nonfat solids:					
5-gallon, 50-pound and larger cans	Unlimited			.50	.50
Sizes smaller than 5-gallon			90		
Domestic (0.25 one end only, where solder tipping required)				CMQ	CMQ
Export				.25	.25
129. Milk, dry, whole, including milk sugar and dietary dried milk-base products	Unlimited				
5-gallon, 50-pound and larger cans				.50	.50
Smaller sizes than 5-gallon				.25	.25
130. Milk, fresh, frozen, refrigerated, or processed	Unlimited				
5-gallon square cans				.50	.50
Other sizes				.25	.25
131. Milk, liquid, condensed, sweetened	Unlimited			.75	.75
132. Milk, liquid, evaporated, and modifications of evaporated milk	Unlimited				
14½-ounce or larger:					
Body				1.25	
Ends				.75	.75
Under 14½-ounce				.75	.75
Poultry and poultry products					
133. Chicken and noodles			90	.25	.25
134. Chicken fricassee	Unlimited			.25	.25
135. Chicken or turkey a la king		100		.25	.25
136. Chicken or turkey, boned	Unlimited			.25	.25
137. Chicken or turkey spread			90	.25	.25
138. Chicken or turkey, whole, half, or disjointed	Unlimited			.25	.25
139. Eggs:					
Frozen	Unlimited			.25	.25
Dry, powdered—for export only		100			
5-gallon square cans				.50	CMQ
Other can sizes				.25	CMQ
Meat (beef, veal, mutton, or pork)					
140. Bacon—export only			90		
All seams soldered				1.25	1.25
Side seams only soldered				.25	.25
141. Barbecued meat	Unlimited				
Enameled cans				.50	.50
Plain body				1.25	1.25
142. Beef and other gravies			90	.25	.25
143. Beef, dried			90	.25	.25
144. Beef, veal, mutton, or pork (boiled, broiled, braised, corned, roasted)	Unlimited				
All seams soldered				1.25	1.25
Side seams only soldered				.25	.25
145. Brains		100		.25	.25
146. Chili con carne, with or without beans	Unlimited			.50	.50
147. Frankfurters in brine		100		.25	.25
148. Frankfurters with barbecue sauce		100		1.25	1.25
149. Frankfurters with beans and tomato sauce		100		1.25	.25
150. Frankfurters with sauerkraut		100		1.50	1.50
151. Ham, deviled	Unlimited			1.25	1.25
152. Ham, spiced or chopped (including luncheon meat)	Unlimited			1.25	.25
153. Hams, whole, halves, quarters, sections, and pork loins, boned and smoked	Unlimited				
Round cans—side seam only soldered				1.25	.25
Oblong cans, 3-pound and larger				1.25	.25
All seams soldered				1.25	1.25
154. Hamburger, including meat balls, with or without onions	Unlimited				
With plain sauce				.25	.25
With tomato sauce				1.25	.25
155. Hash, meat (including corned beef hash)	Unlimited			.25	.25
156. Meat and beans with tomato sauce		100		1.25	.25
157. Meat and gravy (including goulash)	Unlimited			.25	.25
158. Meat in vinegar			90	1.50	1.50
159. Meat loaf	Unlimited			.25	.25
160. Meat, refrigerated (including fancy meats and/or edible organs)	Unlimited			.25	.25
161. Meat spreads, with or without liver		100		.25	.25

SCHEDULE I OF NPA ORDER M-25—CAN SPECIFICATIONS—Continued

Product	Grouping and quota percentages			Can materials	
				Soldered or welded parts	Non-soldered parts
(1)	(2)			(3)	(4)
Meat (beef, veal, mutton, or pork)—Continued	*Group I*	*Group II*	*Group III*		
162. Potted meat	Unlimited			0.25	0.25
163. Sausage (including bulk, casings, in oil, pork, or vienna)	Unlimited			.25	.25
164. Scrapple			90	.25	.25
165. Spareribs and sauerkraut		100		1.50	1.50
166. Stew, meat type (including beef, kidney, and brunswick)	Unlimited			.50	.50
167. Tamales		100		.50	.50
168. Tongue		100		.25	.25
169. Tripe			90	1.25	1.25
Horsemeat					
170. Horsemeat, with or without gravy and/or vegetables, federally inspected (for human consumption only)			90	.25	.25
Miscellaneous food products					
171. Almond and poppy seed paste			90	.25	.25
172. Animal and pet food			90	.25	.25
173. Baby food	Unlimited				
Fruit				1.50	1.50
Vegetables				1.25	1.25
Meat				.50	.50
Fish				.50	.50
Dry, powdered, carbohydrate				CMQ	CMQ
Milk-base				.25	.25
Vegetables with meat				1.25	1.25
Cereal, pudding, and custards with fruit				1.50	1.50
Cereal, pudding, and custards without fruit				.50	.50
174. Baking mixes, dry			90	CMQ	CMQ
175. Baking powder		100		CMQ	CMQ
176. Bakery products, steamed in hermetically sealed cans:					
Pasteurized, over 15 percent moisture content		100		.25	.25
Less than 15 percent moisture content			90	.25	CMQ
177. Barbecue sauce			90	1.25	.25
178. Beer and ale			90	.25	.25
179. Bouillon cubes			90	CMQ	CMQ
180. Candied fruit			90	.50	.50
181. Candy and confectionery			90	CMQ	CMQ
182. Cereals and flour			90	CMQ	CMQ
183. Chinese food specialties		100		1.25	.25
Bamboo shoots.					
Bean sprouts.					
Chop suey.					
Chop suey vegetables.					
Chow mein.					
Egg foo yong.					
Mixed Chinese vegetables.					
Water chestnuts.					
184. Chocolate and cocoa		100		CMQ	CMQ
185. Chocolate pudding, dry			90	CMQ	CMQ
186. Chocolate syrup		100		.25	.25
187. Citrus peel, moist (5-gallon cans only)		100		1.25	1.25
188. Coconut, moist		100		.50	.50
189. Coffee, dry		100			
10-pound and larger cans				.50	CMQ
5-pound and smaller cans				CMQ	CMQ
190. Coffee, liquid concentrate, frozen			90	.25	.25
191. Coffee, soluble		100		CMQ	CMQ
192. Coffee, substitutes, dry			90	CMQ	CMQ
193. Corn meal mush			90	.25	.25
194. Dessert powder			90	CMQ	CMQ
195. Dietary foods, special formula		100			
Dry				CMQ	CMQ
Wet				.50	.50
196. Dry foods specialties				CMQ	CMQ
Peanuts and other edible nut meats, all can sizes		100			
Other items, including but not limited to the following:					
Popped corn.					
Pop corn.					
Potato chips.					
Macaroni.					
Noodles.					
Pretzels:					
3-pound and larger reusable containers		100			
Smaller than 3-pound cans			90		
197. Enchiladas		100		.25	.25
198. Food colors, certified		100		.50	.50
199. Food products packed in pressure-propellant type cans, except as listed under item 123, Cream		100		.50	.50
200. Food stabilizers			90	CMQ	CMQ
201. Fountain fruits and syrups:					
Fruit and other acid syrups				1.25	1.25
Toppings, nonacid in character				.25	.25
Carbonated beverages, base syrups				1.50	1.50
No. 10 cans and larger		100			
Smaller than No. 10 cans			90		
202. Gelatin desserts, other than powder			90	1.25	.25
203. Hominy, processed, wet		100		.25	.25
204. Honey:					
All seams soldered				1.25	1.25
Side seams only soldered				.25	.25
5-pound and larger cans	Unlimited				
Smaller than 5-pound cans			90		
205. Lard and shortening		100			
5-gallon square cans				.50	.50
All other sizes				CMQ	CMQ
Only where can manufacturer is unable to supply satisfactory containers made wholly of black plate				.25	CMQ
206. Macaroni, noodles, and spaghetti, wet pack	Unlimited			1.25	.25

SCHEDULE I OF NPA ORDER M-25—CAN SPECIFICATIONS—Continued

Product (1)	Grouping and quota percentages (2)			Can materials	
				Soldered or welded parts (3)	Non-soldered parts (4)
Miscellaneous food products—Continued	*Group I*	*Group II*	*Group III*		
207. Mayonnaise (including salad dressing and other related products)					
3-gallon cans and larger				1.50	1.50
All other sizes		100			
208. Mincemeat			90		
No. 10 cans				1.50	1.50
Smaller than No. 10		100			
209. Mushroom sauce (from fresh mushrooms)			90		
210. Oils, edible:			90	1.25	.25
5-gallon square cans		100		.50	.50
No. 10, 1-gallon cans and up to 5-gallon cans		100		.25	.25
All other sizes			90	.25	.25
211. Onions, french fried			90	.25	CMQ
212. Peanut and other edible nut butters		100		.25	CMQ
213. Potatoes, french fried, shoestring, sticks			90	CMQ	CMQ
214. Puddings, fruit, including spiced pudding			90	1.25	1.25
215. Ravioli		100		1.25	.25
216. Rice, Spanish (including rice dinner)			90	1.25	.25
217. Sauces, including cream, Newburg and enchilada			90	.25	.25
218. Soups and soup bases, dehydrated, 9-ounce and larger cans only	Unlimited			.25	CMQ
219. Soups, liquid:					
Seasonal from fresh vegetables only	Unlimited				
Asparagus, tomato, and vegetarian vegetable				1.25	.25
All other seasonal				.50	.50
Nonseasonal	Unlimited				
Black bean, bean with bacon, and beef				1.25	.25
Chicken broth and chicken with noodles or rice				.50	.50
All other nonseasonal				.75	.50
220. Soybean milk (liquid, or dry powdered)	Unlimited			.25	.25
221. Spices and condiments		100			
Prepared				1.50	1.50
Dry				CMQ	CMQ
Dredges and sifter top					.50
222. Steak sauce with mushrooms (from fresh mushrooms)			90	1.25	.25
223. Syrups (including the following syrups and blends—cane, corn, molasses, malt, maple, and sorghum):					
All seams soldered (No. 10 cans and larger)		100		1.25	1.25
All seams soldered (smaller than No. 10 cans)			90	1.25	1.25
Double-seamed oblong (1-gallon and larger)		100		1.25	.25
Double-seamed oblong (smaller than 1-gallon)			90	1.25	.25
Double-seamed round (No. 10 cans and larger)		100		.25	.25
Double-seamed round (smaller than No. 10 cans)			90	.25	.25
Irregular shaped			90	.25	.25
224. Spaghetti with meat balls	Unlimited			1.25	.25
225. Tea, dry			90	CMQ	CMQ
226. Tortillas		100		.25	.25
227. Welsh rarebit			90	.25	.25
228. Yeast, dry, edible				CMQ	CMQ
Nonactive		100			
Active			90		
229. All other nonprocessed foods			90	CMQ	CMQ
230. All other processed foods			90	.25	.25
Nonfood products					
231. Aerosol and other pressure-propelled nonfood products.	Same as specified for product involved				
Water-base products				.50	.50
Other products:					
Bodies				.25	
Bottoms					CMQ
Tops with soldered valves or with drawn cones or drawn fittings				.50	.50
232. Abrasives, grinding and buffing compounds, not to be packed dry		100		.25	CMQ
233. Acid, nitro-hydrochloric (outer container)		100		CMQ	CMQ
234. Aircraft supplies for aircraft use only:					
Hydraulic oil		100		1.25	1.25
Hydraulic preservative oil		100		1.25	1.25
Compass fluid		100		.25	.25
Grease, low temperature		100		.25	.25
Antisieze compound for oxygen system		100		.25	.25
235. Aniline		100		1.25	1.25
236. Antifreeze (all types)				.25	.25
Gallon cans	Unlimited				
All other sizes		100			
237. Artists' and school supplies (including water color boxes, trays, pans, cups, chalk and crayon boxes, and all other)			90	CMQ	CMQ
238. Asphalt, pitch, and tar		100		CMQ	CMQ
239. Auto supplies:					
Liquid radiator antirust compounds		100		.50	.50
Radiator stop leaks		100		.50	.50
Hydraulic brake fluid		100		.25	.25
Shock absorber fluid		100		.25	.25
Tire preserver			90	.25	.25
Top dressing paste and liquid			90	.25	.25
Carbon removers		100		.25	.25
Gasoline additives		100		.25	.25
All others			90	CMQ	CMQ
240. Bee feeder cans		100		.25	.25
241. Belt dressing		100		CMQ	CMQ
242. Benzol, toluene, naphtha, xylene, gasoline, and kerosene		100		.25	.25
243. Blood and blood plasma, including extenders and substitutes (outer container)	Unlimited			.25	.25
244. Cements:					
Water-base linoleum		100		1.25	1.25
Rubber, latex-type		100		1.25	1.25
Rubber, neoprene		100		1.25	1.25
Solvent-base linoleum		100		.25	.25
Rubber-base liquid and paste		100		.25	.25
All others			90	CMQ	CMQ

SCHEDULE I OF NPA ORDER M-25—CAN SPECIFICATIONS—Continued

Product (1)	Grouping and quota percentages (2)			Can materials	
				Soldered or welded parts (3)	Non-soldered parts (4)
Nonfood products	*Group I*	*Group II*	*Group III*		
245. Chemicals, dry:					
Phenols		100		1.50	1.50
Phosphorus		100		1.25	1.25
Ammonium salts		100		1.25	1.25
Hypochlorite powders		100		.25	.25
Permanganates		100		.25	.25
Sodium and potassium metals		100		.25	CMQ
Vanadium, catalyst	Unlimited			.25	.25
Cyanides		100		1.25	1.25
All others		100		CMQ	CMQ
246. Chemicals, liquid:					
Alcohols, CP and USP	Unlimited			1.25	1.25
Aldehydes and halogenated hydrocarbons		100		.25	.25
Carbon disulfide		100		.25	.25
Carbon tetrachloride		100		.25	.25
				or SCMT	
Ketones, ethers, glycols		100		.25	.25
Sodium silicate		100		.25	.25
Alcohol, industrial		100		.25	.25
247. Cleaners:					
Window spray			90	1.25	1.25
Wall paper			90	1.25	1.25
				or 8-pound terne	
Radiator, liquid		100		.50	.50
Cleaners, liquid or paste			90	.25	.25
Cleaning fluids, solvent-type			90	.25	.25
All others, dry or powder			90	CMQ	CMQ
Cleaning and scouring powders, metal ends only		100			CMQ
248. Compounds:					
Boiler, liquid		100		.50	.50
Caulking or sealing		100		.25	CMQ
Soldering or welding		100		.25	CMQ
All others		100		CMQ	CMQ
249. Cosmetic and toiletry supplies:					
Brushless shaving cream			90	.75	.75
Hair dressings and pomades			90	.50	.50
Cold creams, lotions, and hair wave preparations			90	.25	.25
Hair wave pads			90	.25	CMQ
All others, including personal and other powders, except baby powders		100		CMQ	CMQ
Baby powders	Unlimited			CMQ	CMQ
250. Dental supplies:					
Tooth powder, ammoniated		100		.25	.25
All others		100		CMQ	CMQ
251. Disinfectants and deodorizers:					
Household, smaller than 1-gallon cans			90		
Industrial, 1-gallon and larger cans		100			
Creosote				.25	.25
Fumigants				.50	.50
Liquid formulations				.50	.50
Pine oil				.25	.25
252. Drugs:					
Antiphlogistine		100		1.25	1.25
Chloroform and ether, USP and ether absolute ACS	Unlimited			1.25	1.25
Ointment and salves		100		.50	.50
Distilled water (outer container) for use in reactivating blood plasma, etc	Unlimited			.25	.25
Ampoules		100		.25	.25
Dry products		100		CMQ	CMQ
253. Dyes:					
Pastes and liquids		100		.50	.50
Dry		100		.25	CMQ
254. Essential oils		100		1.25	1.25
255. Explosives		100		.25	.25
256. Exterminators, paste and powders			90	.25	.25
257. Film boxes		100		.50	.50
258. Fire extinguisher recharges		100		.25	.25
259. First aid cabinets and kits			90	CMQ	CMQ
260. Glues and adhesives:					
Paste and liquid			90	1.25	1.25
Dry			90	CMQ	CMQ
261. Glycerine:					
CP and USP	Unlimited			1.25	1.25
Industrial		100		.50	.50
262. Grain fumigant		100		.50	.50
263. Graphite:					
In oil		100		.25	CMQ
Dry		100		CMQ	CMQ
264. Inks		100			
Spirit aniline				.50	.50
Rotogravure				.50	.50
Printing and duplicating				.25	.25
265. Insecticides:					
Household, smaller than 1-gallon cans			90		
Industrial, 1-gallon and larger cans		100			
Nicotine sulphate				1.50	1.50
Water-base				1.25	1.25
Emulsifiable concentrate				1.25	1.25
Oil-base				.25	CMQ
Dry				CMQ	CMQ
266. Leather dressings and saddle soap			90	.50	.50
267. Lighter fluid			90	.25	CMQ
268. Lubricating grease		100		CMQ	CMQ
269. Lye, toilet bowl and drain cleaners		100		CMQ	CMQ
270. Maleic anhydride		100		.50	.50

SCHEDULE I OF NPA ORDER M-25—CAN SPECIFICATIONS—Continued

Product	Grouping and quota percentages			Can materials	
				Soldered or welded parts	Non-soldered parts
(1)	(2)			(3)	(4)
Nonfood products—Continued	*Group I*	*Group II*	*Group III*		
271. Oils, industrial:					
Animal, fish, or vegetable		100			
5-gallon square cans				0.50	0.50
All other sizes				.25	.25
Transformer		100		.50	.50
Soluble and cutting		100			
Water-base				.25	.25
Oil-base				.25	CMQ
Lubricating and motor		100			
5-gallon cans				SCMT	SCMT
1-quart and 5-quart round				CMQ	CMQ
All other sizes				.25 or SCMT	.25
272. Paint products		100			
Antifouling paints				1.50 or 12-pound terne	1.50
Water-base paints, including latex				.25 or SCMT	.25
Oil-base paints:					
Gallon cans				.25	CMQ
All other sizes				CMQ	CMQ
Lacquers and thinners				.50	.50
Shellac				8-pound terne	
Paint and varnish removers				.50	.50
Varnishes and oil stains				.25	CMQ
Shingle stains				.25	.25
Asphalt paints				CMQ	CMQ
Marine paints (ship storage)				.25	.25
Dry pigments, bronze powders				CMQ	CMQ
273. Plaster of paris		100		CMQ	CMQ
274. Polishes and waxes:					
Water-base			90	.50	.50
Solvent-base			90	.25	CMQ
Shoe liquid			90	8-pound terne	
Shoe paste			90	CMQ	CMQ
275. Putty		100		.25	CMQ
276. Recreational supplies:					
Vacuum or pressure packages			90	.25	CMQ
All other			90	CMQ	CMQ
277. Seeds			90	CMQ	CMQ
278. Seed inoculants, and seed disinfectants		100		.50	.50
279. Snuff:					
All-metal cans			90	.50	.50
Fiber body, metal tops and bottoms		100			.50
280. Soaps and detergents:					
Liquid			90	1.25	1.25
Paste			90	.25	.25
Powders			90	CMQ	CMQ
Mechanics' paste hand cleaners	Unlimited			.25	.25
281. Stock and poultry food:					
Containing 15 percent or more moisture			90	.25	.25
Containing less than 15 percent moisture			90	CMQ	CMQ
282. Stock, pet, and poultry remedies:					
Liquid worm killer, liquid sheep and cattle dip, liquid sheep and horse drench:					
For internal use		100		1.25	1.25
For external use		100		.25	.25
Roost paint		100		1.25	1.25
Dry products		100		CMQ	CMQ
283. Surgical dressings and hospital supplies, bandages, adhesive tape, mustard plasters, etc		100		CMQ	CMQ
284. Tobacco:					
Cigars and cigarettes			10	.25	CMQ
Pipe:					
7-ounce and less		100		CMQ	CMQ
Larger than 7-ounce			90	CMQ	CMQ
285. Turpentine		100		.50	.50
286. Weed killers			90	.50	.50
287. Wood fillers		100			
Wood fillers, cellulose				1.25	1.25
Others				.25	CMQ
288. All other nonfood products			90	CMQ	CMQ

[F. R. Doc. 52-5483; Filed, May 14, 1952; 11:53 a. m.]

[NPA Order M-46A as Amended May 14, 1952]

M-46A—PRIORITY ASSISTANCE FOR FOREIGN PETROLEUM OPERATIONS

This order as amended is found necessary and appropriate to promote the national defense and is issued pursuant to the Defense Production Act of 1950, as amended. Consultation with industry representatives in advance of the issuance of this order as amended has been rendered impracticable due to the fact that it applies to all branches of the foreign petroleum industry.

This amendment affects NPA Order M-46A as amended September 5, 1951, and as further amended by Amendment 1 of March 26, 1952, by adding a new paragraph (b) to section 2 defining "MSA"; by substituting the initials "MSA" for "ECA" wherever those initials previously appeared; by changing the records and reports provisions (section 10) and the provision respecting violations (section 11) to conform their language to corresponding provisions in more recent NPA orders and regulations; and by deleting Schedules I and II and substituting new Schedules I and II therefor.

This restatement of NPA Order M-46A embodies the changes stipulated in the aforesaid Amendment 1 of March 26, 1952.

As amended and restated, NPA Order M-46A reads as follows:

Sec.

AUTHORITY: Sections 1 to 11 issued under sec. 704, 64 Stat. 816, Pub. Law 96, 82d Cong.; 50 U. S. C. App. Sup. 2154. Interpret or apply sec. 101, 64 Stat. 799, Pub. Law 96, 82d Cong.; 50 U. S. C. App. Sup. 2071; sec. 101, E. O. 10161, Sept. 9, 1950, 15 F. R. 6105; 3 CFR, 1950 Supp.; sec. 2, E. O. 10200, Jan. 3, 1951, 16 F. R. 61; 3 CFR, 1951 Supp.; secs. 402, 405, E. O. 10281, Aug. 28, 1951, 16 F. R. 8789; 3 CFR, 1951 Supp.

SECTION 1. *What this order does.* This order explains how priority assistance is made available to petroleum operators to obtain material for use in all countries except the United States and Canada. The order establishes two procedures to be followed in obtaining and using priority assistance. The first procedure relates to use of material for large construction operations. A large construction operation is any one complete construction operation in which the total cost of controlled materials from the United States to be used is $10,000 or more, or in which the total cost of all materials from all sources to be used is $50,000 or more. The second procedure relates to material obtained for any use other than use in a large construction operation. This second procedure includes material for use in production, small construction operations, maintenance, repair, operating supplies, and laboratory equipment.

SEC. 2. *Definitions.* (a) "Operator" means any person to the extent that he is engaged in the petroleum industry outside of the United States, its territories or possessions, or the Dominion of Canada.

(b) "Applicant" means any operator or his agent who, under the Office of International Trade export control regulations, is authorized to apply for an export license.

(c) "Petroleum" means crude oil and associated hydrocarbons, and the products thereof, including but not limited to natural gas.

(d) "Petroleum industry" includes any of the following activities and any operations directly incident to these activities as they pertain to petroleum:

(1) The discovery, development, or depletion of petroleum (production);

(2) The extraction or recovery of natural gasoline or associated hydrocarbons (natural gasoline recovery);

(3) The movement, loading, or unloading of petroleum (transportation);

(4) The processing, reprocessing, or alteration of petroleum, including but not limited to compounding or blending (refining);

(5) The distribution or dispensing of petroleum, or the products thereof, and the storage incident thereto (distribution);

and shall include for each of the above listed branches of the industry, to the extent applicable, the control of, or the investigation into, more effective methods of conducting petroleum operations by means of research, technical, or control laboratories.

(e) "Construction operation" means any use of material for construction, expansion, improvement or reconstruction, incident to any branch of the petroleum industry other than production, but shall include, however, the following uses of material incident to production: (1) A use of material for a vacuum plant or facility; a cycling plant or facility; a plant or facility used for stabilizing of crude oil; a plant or facility for the accumulation and storage of crude oil; a plant or facility for the extraction or recovery of natural gasoline or associated hydrocarbons, or for other treatment, processing, or compression of natural gas; (2) a use of material in a secondary recovery production operation by water flooding or by utilization of gas; or (3) a use of material for production offices or camp and related facilities.

(f) "Program letter" means a letter from the Petroleum Administration for Defense to an applicant approving an operating program to be carried out by the applicant.

(g) "Controlled material" means steel, copper, and aluminum, in the forms and shapes indicated in Schedule I of CMP Regulation No. 1.

(h) "MSA" means the Mutual Security Agency.

SEC. 3. *Assignment of symbols.* (a) Symbols are used to identify programs, uses of material, and countries in which materials obtained with the symbols are to be used. An appropriate symbol, together with a quarterly designation, constitutes an allotment number, which the applicant may use, where authorized, to obtain controlled material. The allotment number is used to identify quantities of controlled material which the applicant is authorized to obtain. An appropriate symbol, preceded by the letters "DO," constitutes a rating which the applicant may apply, where authorized, to obtain material other than controlled material.

(b) The following are the CMP allotment and DO rating symbols to be used by an applicant to procure material for use in the petroleum industry in countries other than the United States or Canada:

Type of material to be procured	MSA countries	Other countries
Controlled material	W-4	W-2.
Other than controlled material.	DO-W-4	DO-W-2.

(c) Schedule I of this order identifies the MSA countries. The CMP allotment and/or rating symbol W-4 must be used for materials which are to be used in all programs in MSA countries. The symbol W-2 must be used for materials which are to be used in all programs in all other countries, except the United States and Canada.

(d) Whenever any symbol is used to obtain controlled material, it must be followed by an appropriate quarterly designation. This quarterly designation represents the calendar quarter of the year during which the operator is permitted to take delivery in the United States of authorized quantities of controlled material. Thus, if the applicant were authorized to use controlled material in a large construction operation in France and the authorization were for delivery in the United States of that material in the first quarter of 1952, he would use the symbol W-4 followed by the abbreviation 1Q52. The complete symbol would be, therefore, W-4-1Q52.

SEC. 4. *Large construction operations.* Form PAD-26A, filed in accordance with the instructions printed thereon, must be used in connection with the priority assistance made available in this order for materials to be used in a large construction operation. A large construction operation is any one complete construction operation in which the total cost of controlled materials from the United States to be used is $10,000 or more, or in which the total cost of all materials from all sources to be used is $50,000 or more. Form PAD-26A is filed to obtain priority assistance for all materials going into the construction operation which it covers. After the form has been returned to the applicant indicating approval and the extent to which he may use priority assistance, the applicant may, to that extent, place delivery orders bearing the appropriate identification set forth in section 3 (b) of this order.

SEC. 5. *All operations other than large construction operations.* (a) Form IT-824, filed quarterly in accordance with the instructions printed thereon, must be used in connection with the priority assistance made available in this order for any material to be used in the industry other than material used in a large construction operation.

(b) If a program letter has been issued to an applicant, he may, without securing prior approval of his Form IT-824, use the appropriate symbol set forth in section 3 (b) of this order to obtain items, other than those listed in Schedule II of this order necessary for the operations covered by his program letter. To obtain items listed in Schedule II, an applicant may not use a symbol until his Form IT-824, filed as required, has been returned to him indicating approval and the extent to which he may use priority assistance. Even if an applicant has a program letter and no Schedule II items are involved, he must file for an export license on Form IT-824, which form, when approved, is an export license for the materials approved thereon.

(c) If a program letter has not been issued to an applicant, he may not use the appropriate symbol required for priority assistance until a Form IT-824, filed as required, has been returned to him, indicating approval and the extent to which he may use the priority assistance.

(d) Schedule II of this order may be amended from time to time by the addition or deletion of items. To facilitate the filing of Form IT-824, the Petroleum Administration for Defense may, in advance of a published amendment of Schedule II, give notice by letter of such prospective amendment to all applicants to whom a program letter has been issued. No applicant receiving such notice shall, after the effective date specified in the notice, use the priority assistance of section 3 (b) of this order for items which have been added, unless as to these items specific approval has been obtained through the filing of Form IT-824.

SEC. 6. *Limitations on priority assistance.* Directives may be issued from time to time with respect to the priority assistance obtainable through the use of either Form IT-824 or PAD-26A. Except as modified by such directives, the provisions of this order shall remain applicable. An operator who is entitled to use the priority assistance of this order shall not use any form of priority assistance otherwise made available to the extent that such assistance is available through this order. This provision, however, shall not prevent the rerating of any delivery pursuant to applicable regulations or procedures or the use of priority assistance otherwise granted where specific directions to this effect have been issued.

SEC. 7. *Emergency or interim assistance.* (a) Form IT-824 may be used in requesting priority assistance where, because of an emergency or for other reasons of necessity, the operator requires material not included on his current Form IT-824 or requires material in greater quantities or on earlier dates than requested in his current Form IT-824. In filing Form IT-824 for emergency or interim assistance, the operator need itemize only those items in those quantities on which assistance is being requested due to the necessity for emergency or interim assistance.

(b) Form PAD-26A may be used as an amendment form to effect changes in delivery dates or quantities of material required for use in the project covered by the original form. Where the form is used as an amendment, reference must be made to the original authorized document and requested adjustments must be specifically set forth.

In that circumstance, he may not use the appropriate symbol until such time as the amended form has been returned to him indicating approval and the extent to which he may use the priority assistance.

SEC. 8. *Certification.* In order to use any symbol authorized pursuant to this order, the applicant must endorse on or attach to each delivery order the appropriate symbol as well as a certification in the following form:

Certified under NPA Order M-46A

SEC. 9. *Effect of revocation or denial of export authority.* If an export license, statement of export clearance, or statement of authority to export any material is revoked or if an export license is denied, any symbol authorized pursuant to this order for material covered by such export license, clearance, or authority shall thereby be revoked as regards delivery of such material to the applicant. The applicant must then notify his supplier or suppliers of the cancellation and may take no delivery of material ordered by use of such symbol. The applicant must also promptly notify the Petroleum Administration for Defense of the cancellation of any orders for any affected Schedule II item or any item designated as a Schedule II item.

SEC. 10. *Records and reports.* (a) Each person participating in any transaction covered by this order shall make and preserve, for at least 3 years thereafter, accurate and complete records of receipts, deliveries, inventories, production, and use, in sufficient detail to permit the determination, after audit, whether each transaction complies with the provisions of this order. This order does not specify any particular accounting method and does not require alteration of the system of records customarily used, provided such records supply an adequate basis for audit. Records may be retained in the form of microfilm or other photographic copies instead of the originals by those persons who, at the time such microfilm or other photographic records are made, maintain such copies of records in the regular and usual course of business.

(b) All records required by this order shall be made available for inspection and audit by duly authorized representatives of the National Production Authority, at the usual place of business where maintained.

(c) Persons subject to this order shall make such records and submit such reports to the National Production Authority as it shall require, subject to the terms of the Federal Reports Act of 1942 (5 U. S. C. 139–139F).

SEC. 11. *Violations.* Any person who wilfully violates any provision of this order, or any other order or regulation of NPA, or who wilfully furnishes false information or conceals any material fact in the course of operation under this order, is guilty of a crime and upon conviction may be punished by fine or imprisonment or both. In addition, administrative action may be taken against any such person to suspend his privilege of making or receiving further deliveries of materials or using facilities under priority or allocation control and to deprive him of further priorities assistance.

NOTE: All reporting and record-keeping requirements of this order have been approved by the Bureau of the Budget in accordance with the Federal Reports Act of 1942.

This order as amended shall take effect May 14, 1952.

NATIONAL PRODUCTION AUTHORITY,
By JOHN B. OLVERSON,
Recording Secretary.

SCHEDULE I

The following are MSA countries:

A. European countries:
- Austria.
- Belgian-Luxemburg Economic Union.
- Denmark.
- Germany (Federal Republic).
- France.
- Greece.
- Iceland.
- Ireland.
- Italy.
- Netherlands.
- Norway.
- Portugal.
- Spain.
- Sweden.
- Trieste, Free Territory of.
- Turkey.
- United Kingdom (including the Channel Islands).
- Yugoslavia.

B. Overseas territories:
- Belgium:
  - Belgian Congo.
  - Ruanda-Urundi.
- Denmark:
  - Greenland.
- France:
  - Tunisia.
  - French Zone of Morocco.
- French West Africa (comprising Senegal, Mauritania, Guinea, Ivory Coast, Dahomey, Sudan, Niger, Upper Volta).
- French Equatorial Africa (comprising Gabon, Middle Congo, Ubangi-Shari, Chad).
- Togoland and Cameroons.
- French Somaliland.
- Madagascar.
- Reunion.
- Comoro.
- French Settlements in India.
- New Caledonia.
- Tuamotu Archipelago, including Society Islands.
- Austral Islands.
- Marquesas Archipelago.
- St. Pierre and Miquelon.
- Martinique.
- Guadeloupe.
- French Guiana.
- Italy:
  - Somalia.

B. Overseas territories—Continued.
- Netherlands:
  - Surinam.
  - Curacao.
  - Dutch New Guinea (or West Irian) claimed by Indonesia.
- Portugal:
  - Azores Islands (part of Portugal).
  - Madeira Islands (part of Portugal).
  - Cape Verde Islands.
  - Portuguese Guinea.
  - Fortress of Sao Joao Baptista de Ajuda.
  - Sao Tome and Principe.
  - Angola.
  - Mozambique.
  - Portuguese India (comprising Goa, Damao, Diu).
  - Macao.
  - Portuguese Timor.
- United Kingdom:
  - Aden.
  - Bahamas.
  - Barbados.
  - British Guiana.
  - British Honduras.
  - Brunei.
  - Cyprus.
  - Falkland Islands.
  - Fiji.
  - Gambia.
  - Gibraltar.
  - Gold Coast.
  - Hong Kong.
  - Jamaica.
  - Kenya.
  - Leeward Islands.
  - Federation of Malaya.
  - Malta.
  - Mauritius.
  - Nigeria.
  - North Borneo.
  - Northern Rhodesia.
  - Nyasaland.
  - St. Helena.
  - Sarawak.
  - Seychelles.
  - Sierra Leone.
  - Singapore.
  - Somaliland Protectorate.
  - Tanganyika.
  - Trinidad.
  - Uganda.
  - Western Pacific Islands (except New Hebrides and Tonga).
  - Windward Islands.
  - Zanzibar.
  - Southern Rhodesia.

C. Far East countries:
- Burma.
- Indo-China (associated states).
- Indonesia.
- Philippines.
- Taiwan (Formosa).
- Thailand.

SCHEDULE II

(1) Controlled material in the forms and shapes indicated in Schedule I of CMP Regulation No. 1, as such schedule may be amended from time to time.

(2) Any item the procurement of which by the use of rating symbols is limited by NPA Regulation 2, as the same may be amended from time to time.

(3) Items on Schedule I to CMP Regulation No. 5, as such schedule may be amended from time to time.

(4) Items on Exhibit A of NPA Order M-41 (metalworking machines), as such exhibit may be amended from time to time.

(5) Items on List A of NPA Order M-43 (construction machinery), as such list may be amended from time to time.

(6) Items on Schedule A of NPA Order M-44 (power and electric equipment), as such schedule may be amended from time to time.

[F. R. Doc. 52-5484; Filed, May 14, 1952; 11:53 a. m.]

Chapter XXI—Office of Rent Stabilization, Economic Stabilization Agency

[Rent Regulation 1, Amdt. 44 to Schedule A]

[Rent Regulation 2, Amdt. 42 to Schedule A]

RR 1—HOUSING

RR 2—ROOMS IN ROOMING HOUSES AND OTHER ESTABLISHMENTS

SCHEDULE A—DEFENSE-RENTAL AREAS

SOUTH CAROLINA

These amendments are issued as a result of joint certification(s) pertaining to critical defense housing areas by the Secretary of Defense and the Director of Defense Mobilization under section 204 (1) of the Housing and Rent Act of 1947, as amended, and a determination as to the relaxation of real estate construction credit controls under section 204 (m) of said act.

Effective May 15, 1952, Rent Regulation 1 and Rent Regulation 2 are amended so that the item of Schedule A reads as set forth below.

(Sec. 204, 61 Stat. 197, as amended; 50 U. S. C. App. Sup. 1894)

Issued this 12th day of May 1952.

TIGHE E. WOODS,
Director of Rent Stabilization.

State and name of defense-rental area	Class	County or counties in defense-rental area under regulation	Maximum rent date	Effective date of regulation
South Carolina				
(278) Sumter	B	Sumter County	Mar. 1, 1942	Dec. 1, 1942
	C	do	Feb. 1, 1951	May 15, 1952

[F. R. Doc. 52-5384; Filed, May 14, 1952; 8:49 a. m.]

[Rent Regulation 3, Amdt. 59 to Schedule A]

RR 3—HOTELS

SCHEDULE A—DEFENSE-RENTAL AREAS

SOUTH CAROLINA

This amendment is issued as a result of joint certification(s) pertaining to critical defense housing areas by the Secretary of Defense and the Director of Defense Mobilization under section 204 (1) of the Housing and Rent Act of 1947, as amended, and a determination as to the relaxation of real estate construction credit controls under section 204 (m) of said act.

Effective May 15, 1952, Rent Regulation 3 is amended so that the item of Schedule A reads as set forth below.

(Sec. 204, 61 Stat. 197, as amended; 50 U. S. C. App. Sup. 1894)

Issued this 12th day of May 1952.

TIGHE E. WOODS,
Director of Rent Stabilization.

Name of defense-rental area	State	County or counties in defense-rental area under regulation	Maximum rent date	Effective date of regulation
(278) Sumter	South Carolina	Sumter County	Feb. 1, 1951	May 15, 1952

[F. R. Doc. 52-5385; Filed, May 14, 1952; 8:49 a. m.]

TITLE 43—PUBLIC LANDS: INTERIOR

Chapter I—Bureau of Land Management, Department of the Interior

Appendix—Public Land Orders

[Public Land Order 822]

ALASKA

WITHDRAWING PUBLIC LANDS FOR USE OF DEPARTMENT OF THE AIR FORCE FOR MILITARY PURPOSES

By virtue of the authority vested in the President and pursuant to Executive Order No. 9337 of April 24, 1943, it is ordered as follows:

Subject to valid existing rights, the following-described public lands in Alaska are hereby withdrawn from all forms of appropriation under the public-land laws, including the mining and mineral-leasing laws and reserved for the use of the Department of the Air Force for military purposes:

FAIRBANKS MERIDIAN

T. 1 N., R. 1 E.,
Sec. 27, E½SW¼NW¼, W½SE¼NW¼.

The area described contains 40 acres.

It is intended that the lands described above shall be returned to the administration of the Department of the Interior when they are no longer needed for the purpose for which they are reserved.

OSCAR L. CHAPMAN,
Secretary of the Interior.

MAY 9, 1952.

[F. R. Doc. 52-5359; Filed, May 14, 1952; 8:45 a. m.]

[Public Land Order 823]

ALASKA

WITHDRAWING PUBLIC LANDS FOR TOWNSITE PURPOSES; REVOKING IN PART PUBLIC LAND ORDER NO. 46 OF OCTOBER 8, 1942

By virtue of the authority vested in the President by section 2380 of the Revised Statutes (43 U. S. C. 711), and otherwise, and pursuant to Executive Order No. 9337 of April 24, 1943, it is ordered as follows:

Subject to valid existing rights, the following-described public lands in Alaska are hereby withdrawn from all forms of appropriation under the public-land laws, including the mining and mineral-leasing laws, and reserved for townsite purposes, to be hereafter disposed under applicable town-site laws:

COPPER RIVER MERIDIAN

T. 4 N., R. 1 W.,
Sec. 19, SE¼;
Sec. 20, SW¼;
Sec. 29, NW¼;
Sec. 30, NE¼.

The areas described aggregate 640 acres.

Public Land Order No. 46 of October 8, 1942, withdrawing public lands for classification and in aid of legislation, which was revoked in part by Public Land Order No. 616 of November 15, 1949, is hereby revoked so far as it affects any of the above-described lands.

OSCAR L. CHAPMAN,
Secretary of the Interior.

MAY 9, 1952.

[F. R. Doc. 52-5357; Filed, May 14, 1952; 8:45 a. m.]

TITLE 47—TELECOMMUNICATION

Chapter I—Federal Communications Commission

[Docket Nos. 10167, 10168]

PART 8—STATIONS ON SHIPBOARD IN THE MARITIME SERVICES

MISCELLANEOUS AMENDMENTS

Correction

In F. R. Doc. 52-4879, appearing at page 3854 of the issue for Thursday, May 1, 1952, the figure "22,205" in item 11b should read "22,025".

TITLE 49—TRANSPORTATION

Chapter I—Interstate Commerce Commission

Subchapter A—General Rules and Regulations

[Docket No. 3666; Order 5]

PARTS 71-78—EXPLOSIVES AND OTHER DANGEROUS ARTICLES

MISCELLANEOUS AMENDMENTS

Correction

In F. R. Doc. 52-5147, appearing at page 4293 of the issue for Saturday, May 10, 1952, the fifth line, "Lead azide. See Initiating explosives.", in the first column of the table under § 72.5 (a) should read: "*Lead azide. See* Initiating explosive."

Subchapter B—Carriers by Motor Vehicle

PARTS 190–197[1]—SAFETY REGULATIONS

Qualifications and maximum hours of service of employees of motor carriers and safety of operation and equipment (Ex Parte No. MC–40).

Maximum hours of service of motor carrier employees (Ex Parte No. MC–2).

Establishing reasonable requirements to promote safety of operation of motor vehicles used in transporting property by private carriers (Ex Parte No. MC–3).

Qualifications of employees and safety of operation and equipment of common carriers and contract carriers by motor vehicle (Ex Parte No. MC–4).

At a general session of the Interstate Commerce Commission, held at its office in Washington, D. C., on the 14th day of April A. D. 1952.

It appearing, that upon our motion pursuant to the authority of section 204 (a) of the Interstate Commerce Act, 49 U. S. C. 304 (a), we instituted a proceeding by order dated December 9, 1946 (11 F. R. 14337) which was designated Ex Parte No. MC–40 and which had for its purpose an investigation and study of the Motor Carrier Safety Regulations, Revised, Parts 1 to 7 inclusive, 49 CFR Parts 190–197, to determine whether the safety of operation of motor vehicles in interstate or foreign commerce and the public interest would be enhanced by their revision and to make such revision as appeared desirable and proper;

It further appearing, that pursuant to such investigation, which included representations from and informal conferences with representatives of parties in interest, the revisions proposed by the Director of our Bureau of Motor Carriers were served with our order of November 6, 1950 (16 F. R. 23) which order limited the issues and scope of the current revision to the proposals attached thereto and provided for the filing by interested persons of verified data, views, and arguments with respect to the proposed revisions;

And it further appearing, that a full investigation of the matters and things, within the scope of our order of November 6, 1950, having been made and full consideration having been given the revisions proposed and the data, views, and arguments of interested persons with respect thereto and the Commission, on the date hereof having made and filed a report setting forth the general basis and purpose of the rules adopted and its conclusions herein, which report[2] is hereby made a part hereof:

It is ordered, That the specific requests for oral hearings, be, and they are hereby, denied.

It is further ordered, That the rules and regulations Parts 190 to 196, inclusive, as set forth hereafter, are hereby approved, adopted, and prescribed, effective July 1, 1952, and shall be observed by common carriers, contract carriers, and private carriers subject to Part II of the act.

[1] This document revises Parts 190–196 only.
[2] Filed as part of the original document.

PART 190—GENERAL

SUBPART A—DEFINITIONS

SUBPART B—GENERAL

SUBPART C—FIELD OFFICES

AUTHORITY: §§ 190.1 to 190.40 issued under 49 Stat. 546, as amended; 49 U. S. C. 304.

CROSS REFERENCE: See §§ 194.5 and 195.9 for references to field offices.

SUBPART A—DEFINITIONS

§ 190.1 *Motor vehicle.* The term "motor vehicle" means any vehicle, machine, tractor, trailer, or semitrailer propelled or drawn by mechanical power and used upon the highways in the transportation of passengers or property, or any combination thereof determined by the Commission, but does not include any vehicle, locomotive, or car operated exclusively on a rail or rails, or a trolley bus operated by electric power derived from a fixed overhead wire, furnishing local passenger transportation similar to street-railway service.

§ 190.2 *Vehicle.* The term "vehicle" means any conveyance of any type whatsoever operated upon the highways.

§ 190.3 *Bus.* The term "bus" means any motor vehicle designed, constructed, and used for the transportation of passengers; including taxicabs.

§ 190.4 *Truck.* The term "truck" means any self-propelled motor vehicle except a truck tractor, designed and used, or exclusively used whether or not so designed, for the transportation of property.

§ 190.5 *Truck tractor.* The term "truck tractor" means a self-propelled motor vehicle designed and used primarily for drawing other vehicles and not so constructed as to carry a load other than a part of the weight of the vehicle and load so drawn.

§ 190.6 *Semitrailer.* The term "semitrailer" means any motor vehicle other than a "pole trailer," with or without motive power, designed to be drawn by another motor vehicle and so constructed that some part of its weight rests upon the towing vehicle.

§ 190.7 *Full trailer.* The term "full trailer" means any motor vehicle, with or without motive power, other than a "pole trailer," designed to be drawn by another motor vehicle and so constructed that no part of its weight except the towing device rests upon the towing vehicle. A semitrailer equipped with an auxiliary front axle (dolly) shall be deemed to be a "full trailer."

§ 190.8 *Pole trailer.* The term "pole trailer" means any vehicle without motive power, possibly of variable wheel base, designed to be drawn by another vehicle, and attached to the towing vehicle by means of a "reach," or "pole," or by being "boomed" or otherwise secured to the towing vehicle, and ordinarily used for transporting long or irregular-shaped loads such as poles, pipes, or structural members capable generally of sustaining themselves as beams between the supporting connections.

§ 190.9 *Driveaway-towaway operation.* The term "driveaway-towaway operation" means any operation in which any motor vehicle or motor vehicles, new or used, constitute the commodity being transported, when one set or more of wheels of any such motor vehicle or motor vehicles are on the roadway during the course of transportation; whether or not any such motor vehicle furnishes the motive power.

§ 190.10 *Gross weight.* The term "gross weight" means the combined weight of the motor vehicle and any load thereon.

§ 190.11 *Driver.* The term "driver" means any person who drives any motor vehicle.

§ 190.12 *Business district.* The term "business district" means the territory contiguous to and including a highway when within any 600 feet along such highway there are buildings in use for business or industrial purposes, including but not limited to hotels, banks, or office buildings, railroad stations, and public buildings which occupy at least 300 feet of frontage on one side or 300 feet collectively on both sides of the highway.

§ 190.13 *Residence district.* The term "residence district" means the territory contiguous to and including a highway not comprising a business district when the property on such highway for a distance of 300 feet or more is in the main improved with residences or residences and buildings in use for business.

§ 190.14 *Other terms.* Any other term used in Parts 190–197 of this subchapter is used in its commonly accepted meaning, except where such other term has been defined elsewhere in this part or in section 203 (a) of the Interstate Commerce Act (49 U. S. C. 303 (a)), in which event the definition therein given shall apply.

SUBPART B—GENERAL

§ 190.30 *State and local laws, effect on.* Except as otherwise specifically indicated, Parts 190–197 of this subchapter are not intended to preclude States or

subdivisions thereof from establishing or enforcing State or local laws relating to safety, the compliance with which would not prevent full compliance with these regulations by the persons subject thereto.

§ 190.31 *Vehicles used for purposes other than as defined.* Whenever any motor vehicle other than a bus is used to perform the functions normally performed by a bus, the regulations pertaining to busses and to the transportation of passengers shall apply to that motor vehicle and to its operation as though it were a bus, except with respect to vehicles operated by a motor carrier to transport its employees to and from their place of work in the regular course of the carrier's business. Likewise, whenever any motor vehicle of one type is so used as to perform the functions normally performed by a motor vehicle of another type, the requirements of Parts 190–197 of this subchapter shall apply to such motor vehicle and to its operation in the same manner as though such motor vehicle were actually a motor vehicle of the latter type.

§ 190.32 *Motor carrier to require observance of driver regulations.* Whereever in Parts 190–197 of this subchapter a duty is prescribed for a driver or a prohibition is imposed upon him, it shall be the duty of the motor carrier to require observance of such prescription or prohibition; and, if the motor carrier is himself a driver, he shall likewise be bound thereby.

§ 190.33 *Applicability of regulations.* Parts 190–197 of this subchapter shall be applicable to common carriers, contract carriers, and private carriers subject to Part II, Interstate Commerce Act (49 U. S. C. 301 et seq.), as shown in the following table:

	Applicable parts of regulations						
	191	192	193	194[1]	195	196	197
A. Vehicles and drivers used in transportation wholly within a municipality or between contiguous municipalities or within a zone adjacent to and commercially a part of such municipality or municipalities:							
1. When transporting explosives or other dangerous articles.	Yes	Yes	Yes	Yes	Yes	Yes	Yes.
2. When not transporting explosives or other dangerous articles.	No	No	No	No	Yes	No	No.
B. Vehicles and drivers used in transportation outside a municipality or contiguous municipalities or a zone adjacent to and commercially a part of such municipality or municipalities:							
1. When transporting explosives or other dangerous articles.	Yes	Yes	Yes	Yes	Yes	Yes	Yes.
2. When not transporting explosives or other dangerous articles.	Yes	Yes	Yes	Yes	Yes	Yes	No.

[1] Part 194 does not apply to private carriers.

NOTE: The operations outlined in A and B above include the transportation and use of certain vehicles as specifically described in section 203 (b) of the act, which include, generally, the following: (1) School buses; (2) taxicabs; (3) hotel buses; (4) motor vehicles under control of the Secretary of the Interior; (5) motor vehicles of agricultural cooperative associations; (6) motor vehicles used exclusively in carrying ordinary livestock, fish, or agricultural commodities; (7) motor vehicles used exclusively in distribution of newspapers; (7a) transportation incidental to transportation by aircraft; (8) transportation wholly within a municipality or between contiguous municipalities or within a zone adjacent to and commercially a part of such municipality or municipalities; (9) the casual, occasional, or reciprocal transportation of passengers (when arranged for by brokers or other persons for compensation) and of property consisting of explosives or other dangerous articles by motor vehicle, except that Part 195 is applicable to all casual, occasional, or reciprocal transportation by motor vehicle in interstate or foreign commerce for compensation by any person not engaged in transportation by motor vehicle as a regular occupation or business.

The term "private carrier of property by motor vehicle" means any person not included in the terms "common carrier by motor vehicle" or "contract carrier by motor vehicle", who or which transports in interstate or foreign commerce by motor vehicle property of which such person is the owner, lessee, or bailee, when such transportation is for the purpose of sale, lease, rent, or bailment, or in furtherance of any commercial enterprise. (Sec. 203 (a) (17) of the act.) Except as otherwise specifically provided, motor vehicles controlled and operated by any farmer when used in the transportation of agricultural commodities and products thereof from his farm, or in the transportation of supplies to his farm, are subject to the same regulations as those applicable to private carriers of property.

SUBPART C—FIELD OFFICES

§ 190.40 *Field offices.* (a) The district field offices of the Bureau of Motor Carriers, at which motor carriers are required to file reports by the provisions of §§ 194.5, 194.7, 194.9, and 195.9, are located as follows:

District No.	Territory included	Address of district office
1	Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.	1220 North Station, Office Bldg., 150 Causeway St., Boston 14, Mass.
2	Connecticut, New Jersey, and New York	346 Broadway, New York 13, N. Y.
3	Delaware, District of Columbia, Maryland, and the counties of Pennsylvania east of east county line of McKean, Cameron, Clearfield, Blair, and Bedford.	819 City Centre Bldg., 121 North Broad St., Philadelphia 7, Pa.
4	Ohio, West Virginia, and the counties of Pennsylvania west of east county line of McKean, Cameron, Clearfield, Blair, and Bedford.	311 Old Post Office Bldg., Columbus 15, Ohio.
5	North Carolina, South Carolina, and Virginia	240 Post Office Bldg., Charlotte 2, N. C.
6	Alabama, Florida, and Georgia	701 Grant Bldg., Atlanta 3, Ga.
7	Kentucky, Mississippi, and Tennessee	630 Third National Bank Bldg., Nashville 3, Tenn.
8	Indiana, Illinois, and Michigan	872 U. S. Customhouse, 610 South Canal St., Chicago 7, Ill.
9	Minnesota, North Dakota, South Dakota, and Wisconsin	109 Federal Office Bldg., Minneapolis 1, Minn.
10	Iowa, Kansas, Missouri, and Nebraska	912 Baltimore Ave., Kansas City 6, Mo.
12	Arkansas, Louisiana, Oklahoma, and Texas	627 Texas & Pacific Bldg., Fort Worth 2, Tex.
13	Colorado, New Mexico, and Wyoming	626 Central Savings Bank Bldg., Denever 2, Colo.
14	Idaho, Montana, and Utah	452 U. S. Post Office Bldg., Salt Lake City 1, Utah.
15	Oregon and Washington	208 Pioneer Post Office Bldg., Portland 4, Oreg.
16	Arizona, California, and Nevada	Flood Bldg. 870 Market St., San Francisco 2, Calif.

(b) Motor carriers having their principal place of business outside the borders of the United States shall file the reports required by §§ 194.5, 194.7, 194.9, and 195.9 at district offices as follows:

	District
Canada:	
Alberta	14
British Columbia	15
Manitoba and Saskatchewan	9
New Brunswick, Nova Scotia, and Prince Edward Island	1
Ontario	8
Quebec	2
All other Canadian Provinces:	
West of 95° west longitude	15
East of 95° west longitude	1
Mexico:	
Baja California and Sonora	16
Those in all other Mexican States	12

PART 191—QUALIFICATIONS OF DRIVERS

Sec.

AUTHORITY: §§ 191.1 to 191.13 issued under 49 Stat. 546, as amended; 49 U. S. C. 304.

§ 191.1 *Compliance required.* Every motor carrier, and his or its officers, agents, representatives and employees who drive motor vehicles or are responsible for the hiring, supervision, training, assignment or dispatching of drivers shall comply and be conversant with the requirements of this part.

§ 191.2 *Minimum requirements.* No person shall drive, nor shall any motor carrier require or permit any person to drive, any motor vehicle unless such person possesses the following minimum qualifications:

(a) *Mental and physical condition.* (1) No loss of foot, leg, hand or arm.

(2) No mental, nervous, organic, or functional disease, likely to interfere with safe driving.

(3) No loss of fingers, impairment of use of foot, leg, fingers, hand or arm, or other structural defect or limitation, likely to interfere with safe driving.

(b) *Eyesight.* Visual acuity of at least 20/40 (Snellen) in each eye either without glasses or by correction with glasses; form field of vision in the horizontal meridian shall not be less than a total of 140 degrees; ability to distinguish colors red, green, and yellow; drivers requiring correction by glasses shall wear properly-prescribed glasses at all times when driving, provided however that until January 1, 1954, a visual acuity, either without glasses or by correction with glasses, of at least 20/40 in one eye and 20/100 in the other eye will be acceptable under this section with respect to any person working as a driver on the effective date of this section or who was working as a driver at any time within six months prior to such effective date.

(c) *Hearing.* Hearing shall not be less than 10/20 in the better ear, for conversational tones, without a hearing aid.

(d) *Liquor, narcotics, and drugs.* Shall not be addicted to the use of narcotics or habit-forming drugs, or the excessive use of alcoholic beverages or liquors.

§ 191.3 *Driving experience.* Every driver shall be experienced in driving some type of motor vehicle (including private automobiles) for not less than one year, including experience throughout the four seasons.

§ 191.4 *Driving skill.* Every driver shall be competent by reason of experience or training to operate safely the type of motor vehicle or motor vehicles which he drives.

§ 191.5 *Knowledge of regulations.* Every driver shall be familiar with the rules and regulations established by the Commission pertaining to the driving of motor vehicles.

§ 191.6 *Age.* Every driver shall be not less than 21 years of age, provided, however, that a person not less than 18 years of age may be permitted to drive a motor vehicle controlled and operated by any farmer and used in the transportation of agricultural commodities and products thereof from his farm or in the transportation of supplies to his farm, if such vehicle does not exceed a gross weight, including the load, of 10,000 pounds.

§ 191.7 *Knowledge of English.* Every driver shall be able to read and speak the English language.

§ 191.8 *Original physical examination of drivers.* No person shall drive nor shall any motor carrier require or permit any person to drive any motor vehicle unless such person shall have been physically examined and shall have been certified by a licensed doctor of medicine as meeting the requirements of § 191.2 except that a motor carrier may continue to use as a driver until January 1, 1954, any person for whom it has on file a valid certificate of physical examination or who was qualified as a driver without such examination under the regulations of the Commission in effect immediately prior to the effective date of this section: *Provided, however,* That this section shall not apply to drivers of motor vehicles controlled and operated by any farmer when used in the transportation of agricultural commodities or products thereof from his farm, or in the transportation of supplies to his farm.

§ 191.9 *Periodic physical examination of drivers.* On and after January 1, 1954, every driver shall be physically reexamined at least once in every 36 months and no person shall drive nor shall any motor carrier require or permit any person to drive any motor vehicle unless such person shall have been physically examined and certified by a licensed doctor of medicine as meeting the requirements of § 191.2: *Provided, however,* That this section shall not apply to drivers of motor vehicles controlled and operated by any farmer when used in the transportation of agricultural commodities or products thereof from his farm, or in the transportation of supplies to his farm.

§ 191.10 *Certificate of physical examination.* If a physical examination is required by §§ 191.8 or 191.9, every motor carrier shall have in its files at its principal place of business for every driver employed or used by it a legible certificate of a licensed doctor of medicine based on a physical examination as required by §§ 191.8 and 191.9 or a legible photographically reproduced copy thereof, and every such driver, if a physical examination is required with respect to him by §§ 191.8 and 191.9, shall have in his possession, while driving, such a certificate or a photographically reproduced copy thereof covering himself.

§ 191.11 *Doctor's certificate.* The doctor's certificate shall certify as follows:

DOCTOR'S CERTIFICATE

This is to certify that I have this day examined ---------- in accordance with § 191.2, and the physical examination procedure prescribed by the Motor Carrier Safety Regulations, Revision of 1952 of the Interstate Commerce Commission, and that I find him

Qualified under said rules ☐
Qualified only when wearing glasses ☐

I have kept on file in my office a completed examination form for this person.

---------- ----------
(Date) (Place)

(Signature of examining doctor)

(Address of doctor)

Signature of driver ----------
Address of driver ----------

Such certificate shall be based on a physical examination made and recorded generally in accordance with the following instructions and examination form.

GENERAL INSTRUCTIONS FOR MAKING PHYSICAL EXAMINATION AND RECORDING FINDINGS

[Be sure to record an answer to each question. When negative or positive, so state]

MEDICAL HISTORY

The purpose of this physical examination is to detect the presence of physical and mental defects of such a character and extent as to affect the applicant's ability to operate safely a motor vehicle. The examination should be made carefully and at least as complete as is indicated by the attached form. Defects may be recorded which do not, because of their character or degree, indicate that a certificate of physical fitness should be denied. The presence, however, of these defects should be discussed with the applicant and he should be encouraged to take the necessary steps to insure correction particularly of those which if neglected might lead to a condition likely to affect his ability to drive safely. Careful inquiry regarding past illness, the character and date of such illness, may reveal cause for defects found upon physical examination. Lack of knowledge concerning the etiology of certain defects may result in the rejection for employment. Such data also may indicate the need for making certain laboratory tests.

General appearance and development: Note marked underweight or overweight; any posture defects; perceptible limp, anemia, tremor or other form of nervousness such as might be caused by chronic alcoholism, thyroid intoxication, or other illnesses. The regulations of the Interstate Commerce Commission provide that no driver shall be addicted to the use of narcotics or habit-forming drugs, or the excessive use of alcoholic liquors or beverages.

Head—Eyes: The telebinocular, Snellen chart, and other approved tests may be used to measure visual acuity. It is desired, however, when other than the Snellen chart is used, that the results of such test be expressed in values comparable to the standard Snellen test. If applicant wears glasses, these should be worn while applicant's visual acuity is being tested. Indicate on record by striking the inapplicable phrase on form "without glasses" or "with glasses if worn." In recording distance vision use 20 feet as normal. Report all vision as a fraction with 20 as numerator and the smallest type read at 20 feet as denominator. Note ptosis, discharge, corneal scar, exophthalmos or strabismus uncorrected by glasses.

Ears: Note evidence of mastoid or middle ear disease; discharge. In recording hearing, record 20 feet as normal distance for conversational voice and record deviation from normal as fraction with 20 feet as denominator and actual distance as numerator.

Mouth: Note evidence of infection, pyorrhea.

Throat: Note evidence of disease, enlarged or infected tonsils.

Thorax—Heart: Stethoscopic examination is required. Note murmurs and arrhythmias. Electro-cardiogram is required when other findings indicate desirability.

Blood pressure: May be recorded with either spring or mercury column type of sphygmomanometer.

Pulse: Normal pulse taken after being seated at least two minutes, then have applicant stand and placing one foot on the seat of an ordinary chair raise his body to an erect position 20 times in 30 seconds. Pulse rate should return to his normal after two minutes' rest. Because of abnormal conditions, some applicants will be unable to do this. This test has been found helpful in ascertaining physical ability for work.

Lungs: It is necessary that the auscultatory cough be used. Tuberculosis, if suspected, state whether active or arrested, and if arrested, your opinion as to how long it has been quiescent. Sputum to be examined for tubercle bacilli in all suspected cases.

Abdomen—Scars: If present, state whether recent and if abnormally tender or if there is any evidence of hernia at the site of scar.

Abnormal masses: If present, note tenderness and whether or not individual knows how long they have been present.

Tenderness: When noted, state where most pronounced and cause suspected.

Hernia: Note whether no hernia, but impulse on coughing; no hernia or impulse, but abnormally large rings. Any hernia should be noted, and if present, state whether it is retained by well-fitted truss.

Genito-urinary: When scars or urethral discharge are present, indicate patient's reason for same and when indicated, submit smear of discharge to laboratory for examination.

Reflexes: If positive Rhomberg is reported, indicate degree. Pupillary reflexes should be reported for both light and accommodation. Knee jerks are to be reported absent only when not obtainable upon reinforcement and as increased when foot is actually lifted from the floor following light blow upon the patella; otherwise as normal.

Extremities: Be sure to record loss of foot, leg, fingers, hand or arm, or impairment of use thereof, or other structural defect or limitation, likely to interfere with safe driving.

Upper: Note deformities and limitation of motion.

Lower: Note deformities, limitation of motion; varicose veins.

In case of hand deformities, note particularly whether or not sufficient grip is present to enable driver to secure a grip on the wheel. Record chronic ulcers. Note any atrophy or paralysis.

Spine: Note deformities and limitation of motion.

Laboratory findings: Urine analysis is indicated whenever systolic blood pressure is over 150 and diastolic over 100 and such other times as medical history or findings upon physical examination may indicate that they are necessary. A serological test should always be taken in case of those giving history of luetic infection or present physical findings upon examination presenting possibility of latent syphilis.

Upon completion of the examination, physician should always date and sign his record of the same.

MINIMUM REQUIREMENTS OF § 191.2

(a) Mental and physical condition:

(1) No loss of foot, leg, hand, or arm.

(2) No mental, nervous, organic, or functional disease, likely to interfere with safe driving.

(3) No loss of fingers, impairment of use of foot, leg, fingers, hand or arm, or other structural defect or limitation, likely to interfere with safe driving.

(b) Eyesight: Visual acuity of at least 20/40 (Snellen) in each eye either without glasses or by correction with glasses; form field of vision in the horizontal meridian shall not be less than a total of 140 degrees; ability to distinguish colors red, green, and yellow; drivers requiring correction by glasses shall wear properly prescribed glasses at all times when driving, provided however that until January 1, 1954, a visual acuity, either without glasses or by correction with glasses, of at least 20/40 in one eye and 20/100 in the other eye will be acceptable under this section with respect to any person employed as a driver on or within six months prior to the effective date of this section.

(c) Hearing: Hearing shall not be less than 10/20 in the better ear, for conversational tones, without a hearing aid.

(d) Liquor, narcotics, and drugs: Shall not be addicted to the use of narcotics or habit-forming drugs, or the excessive use of alcoholic beverages or liquors.

PHYSICAL EXAMINATION OF DRIVERS

Date _____

Name _____
(Please print) (Last) (First) (Middle)

Present address _____
(Number) (Street)

_____
(City) (State)

_____
(Social Security Account No.)

Birth _____ Age _____
(Month, day, year) (Place)

HEALTH HISTORY

Yes	No	
☐	☐	Head or spinal injuries (severe).
☐	☐	Convulsions (fits, epilepsy).
☐	☐	Encephalitis (sleeping sickness).
☐	☐	Ever confined as chronic invalid.
☐	☐	Heart disease.
☐	☐	Tuberculosis.
☐	☐	Syphilis.
☐	☐	Gonorrhea.
☐	☐	Diabetes.
☐	☐	Stomach ulcer.
☐	☐	Rheumatic fever.
☐	☐	Asthma.
☐	☐	Kidney disease.
☐	☐	Suffering from incurable disease.
☐	☐	Permanent defect as result of disease or accident.

Other illnesses or injuries _____

PHYSICAL EXAMINATION

General appearance and development:
Good _____ Fair _____ Poor _____
Height _____ Weight _____
Head:
(Without glasses)
Eyes: For distance _____
Right 20/_____ Left 20/_____
(With glasses if worn)
Evidence of disease or injury:
Right _____ Left _____
Color vision _____ Horizontal field of vision:
Right _____° Left _____°
Ears: Hearing, 20 feet:
Right ear _____/20. Left ear _____/20.
Disease or injury _____
Mouth _____ Throat _____
Thorax:
Heart _____
If organic disease is present, is it fully compensated? _____
Blood pressure (sitting):
Systolic _____ Diastolic _____
Pulse: Before exercise _____
Two minutes' rest after exercise _____
Lungs: _____
Abdomen:
Scars _____ Abnormal masses _____
Tenderness _____
Hernia: Yes ____No ____ If so, where? ____
It truss worn? _____
Genito-Urinary:
Scars_____ Urethral discharge_____
Reflexes:
Rhomberg _____
Pupillary _____ Light R _____ L _____
Accommodation R _____ L _____
Knee Jerks:
Right: Normal___ Increased___ Absent___
Left: Normal___ Increased___ Absent___
Extremities:
Upper _____
Lower _____
Spine _____
Laboratory findings:
Urine: Sp. Gr._____ Alb._____ Sugar_____
Blood Serology _____
Chest X-ray _____

_____
(Date)

_____
(Examining doctor)

_____
(Address)

§ 191.12 *Carrier's right to require additional qualifications.* Nothing contained in Parts 190–197 of this subchapter shall be so construed as to prevent a motor carrier from requiring additional or more stringent physical, mental, or intellectual qualifications or age requirements than prescribed in this part as minima; or to require more frequent or more stringent physical or mental examinations than prescribed in this part, notwithstanding that a driver may have in his possession a doctor's certificate as herein required.

§ 191.13 *Driver's past record.* In addition to the other qualifications required by this part, motor carriers shall in the employment and use of drivers and from time to time thereafter in continuing drivers in their service give due consideration to the following factors where they exist:

(a) Violations of laws or regulations governing the operation of motor vehicles of which the driver is guilty, especially as to those violations which tend to establish a disregard for regulatory requirements and for the public safety.

(b) The driver's accident record insofar as it tends to establish a lack of concern for or indifference to his own or the public's safety.

(c) Violations of criminal laws of which the driver is guilty, especially with respect to those offenses which tend to demonstrate his unfitness in the public interest to be a driver of a motor vehicle in interstate or foreign commerce.

Motor carriers shall maintain and preserve as a part of each driver's personnel record a summary of all driver acts and offenses which are within the purview of this section. In addition to the periodic review of such records as contemplated by this regulation, motor carriers shall specifically review the individual record of a driver when he is involved in a serious accident to the end that reckless or accident-prone drivers may not continue to drive vehicles as a hazard to the public safety.

PART 192—DRIVING OF MOTOR VEHICLES

SUBPART A—GENERAL

SUBPART B—DRIVING OF VEHICLES

SUBPART C—STOPPED VEHICLES

Sec.

AUTHORITY: §§ 192.1 to 192.68 issued under 49 Stat. 546, as amended; 49 U. S. C. 304.

SUBPART A—GENERAL

§ 192.1 *Compliance required.* Every motor carrier shall comply with the requirements of this part, shall instruct its officers, agents, representatives and drivers with respect thereto, and shall take such measures as are necessary to insure compliance therewith by such persons. All officers, agents, representatives, drivers, and employees of motor carriers directly concerned with the management, maintenance, operation, or driving of motor vehicles, shall comply with and be conversant with the requirements of this part.

§ 192.2 *Additional carrier rules permitted.* Nothing contained in Parts 190–197 of this subchapter shall be construed as prohibiting any motor carrier from enforcing additional rules and regulations relating to safety of operation, not inconsistent with Parts 190–197 of this subchapter, tending to a greater degree of precaution against accidents.

§ 192.3 *Driving rules to be obeyed.* Every motor vehicle shall be driven in accordance with the laws, ordinances, and regulations of the jurisdiction in which it is being operated, unless such laws, ordinances and regulations are at variance with specific regulations of this Commission which impose a greater affirmative obligation or restraint.

§ 192.4 *Driving while ill or fatigued.* No driver shall drive or be required or permitted to drive a motor vehicle while his ability or alertness is so impaired through fatigue, illness, or any other cause as to make it unsafe for him to begin or continue to drive, except in case of grave emergency where the hazard to passengers would be increased by observance of this section and then only to the nearest point at which the safety of passengers is assured.

§ 192.5 *Alcoholic beverages.* No driver shall drive or be required or permitted to drive a motor vehicle, be in active control of any such vehicle, or go on duty or remain on duty, when under the influence of any alcoholic beverage or liquor, regardless of its alcoholic content, nor shall any driver drink any such beverage or liquor while on duty.

§ 192.6 *Schedules to conform with speed limits.* No motor carrier shall schedule a run nor permit nor require the operation of any motor vehicle between points in such period of time as would necessitate the vehicle being operated at speeds greater that those prescribed by the jurisdictions in or through which the vehicle is being operated.

§ 192.7 *Equipment, inspection and use.* No motor vehicle shall be driven unless the driver thereof shall have satisfied himself that the following parts and accessories are in good working order; nor shall any driver fail to use or make use of such parts and accessories when and as needed:

Service brakes, including trailer brake connections.
Parking (hand) brake.
Steering mechanism.
Lighting devices and reflectors.
Tires.
Horn.
Windshield wiper or wipers.
Rear-vision mirror or mirrors.
Coupling devices.

§ 192.8 *Emergency equipment, inspection, and use.* No motor vehicle shall be driven unless the driver thereof shall have satisfied himself that the emergency equipment required by §§ 193.95 and 193.96 of this subchapter are in place and ready for use; nor shall any driver fail to use or make use of such equipment when and as needed.

§ 192.9 *Safe loading*—(a) *Distribution and securing of load.* No motor vehicle shall be driven nor shall any motor carrier permit or require any motor vehicle to be driven if it is so loaded, or if the load thereon is so improperly distributed or so inadequately secured, as to prevent its safe operation.

(b) *Doors, tarpaulins, tailgates and other equipment.* No motor vehicle shall be driven unless the tailgate, tailboard, tarpaulins, doors, all equipment and rigging used in the operation of said vehicle, and all means of fastening the load, are securely in place.

(c) *Interference with driver.* No motor vehicle shall be driven when the lading or any other object obscures his view ahead, or to the right or left sides, or interferes with the free movement of his arms or legs, or prevents his free and ready access to the accessories required for emergencies, or prevents the free and ready exit of any person from the cab or driver's compartment.

(d) *Passengers on busses.* No bus shall be driven unless:

(1) Standees are to the rear of a line or other device prescribed in § 193.90 of this subchapter.

(2) Aisle seats, if any, are in accordance with § 193.91 of this subchapter.

(e) *Freight or express on busses.* No bus transporting baggage, express or freight shall be driven unless such articles are stowed in a manner which will assure: (1) Unrestricted freedom of motion to the driver for proper operation of the bus; (2) unobstructed passage to all exists by any person; and (3) adequate protection to passengers and others from injury as a result of the displacement or falling of such articles.

SUBPART B—DRIVING OF VEHICLES

§ 192.10 *Railroad grade crossings; stopping required.* (a) Every motor vehicle transporting any of the following:

(1) Passengers;
(2) Explosives—Class A or Class B;
(3) Chlorine; or,

(b) Any motor vehicle which in accordance with the Commission's regulations is placarded with one of the following markings:

(1) Dangerous;
(2) Dangerous—Radioactive material;
(3) Compressed gas;
(4) Poison gas; or,

(c) Any cargo tank, whether loaded or empty, used for the transportation of any dangerous article as defined in the regulations of the Commission shall, upon approaching any railroad grade crossing, make a full stop not more than 50 feet, nor less than 15 feet from the nearest rail of such railroad grade crossing, and shall not proceed until due caution has been taken to ascertain that the course is clear; except that a full stop need not be made at:

(1) A street car crossing within a business or residence district of a municipality;

(2) A railroad grade crossing where a police officer or a traffic-control signal (not a railroad flashing signal) directs traffic to proceed;

(3) An abandoned or exempted grade crossing which is clearly marked as such by or with the consent of the proper state authority, when such marking can be read from the driver's position.

§ 192.11 *Railroad grade crossings; slowing down required.* Every motor vehicle other than those listed in § 192.10 shall, upon approaching a railroad grade crossing, be driven at a rate of speed which will permit said motor vehicle to be stopped before reaching the nearest rail of such crossing and shall not be driven upon or over such crossing until due caution has been taken to ascertain that the course is clear.

§ 192.12 *Drawbridges; stopping of busses.* Every motor vehicle transporting passengers shall, upon approaching any drawbridge, known or marked as such, be brought to a complete stop, not less than 50 feet from the lip of the draw, and shall proceed only when the driver has definitely ascertained that the draw is completely closed. A full stop need not be made at any drawbridge protected by a traffic "stop and go" signal giving positive indication to approaching vehicles to proceed, or where upon the opening of the draw, traffic is controlled by an attendant or traffic officer.

§ 192.13 *Drawbridges; slowing down of other vehicles.* Any other motor vehicle, shall, upon approaching a drawbridge, be driven at a rate of speed which

will permit said motor vehicle to be stopped before reaching the lip of the draw and shall proceed only when the draw is completely closed.

§ 192.14 *Hazardous conditions; extreme caution.* Extreme caution in the operation of a motor vehicle shall be exercised when hazardous conditions, such as those caused by snow, ice, sleet, fog, mist, rain, dust, or smoke, adversely affect visibility or traction. Speed shall be reduced when such conditions exist. If conditions become sufficiently dangerous, the operation of the vehicle shall be discontinued and shall not be resumed until the vehicle can be safely operated. Whenever compliance with the foregoing provisions of this rule increases hazard to passengers, the motor vehicle may be operated to the nearest point at which the safety of passengers is assured.

SUBPART C—STOPPED VEHICLES

§ 192.20 *Unattended vehicles; precautions.* No motor vehicle shall be left unattended until the parking brake has been securely set and all reasonable precautions have been taken to prevent the movement of such vehicle.

§ 192.21 *Stopped vehicles not to interfere with other traffic.* No motor vehicle shall be stopped, parked, or left standing, whether attended or unattended, upon the traveled portion of any highway outside of a business or residence district, when it is practicable to stop, park, or leave such vehicle off the traveled portion of the highway. In the event that conditions make it impracticable to move such motor vehicle from the traveled portion of the highway, the driver shall make every effort to leave all possible width of the highway opposite the standing vehicle for the free passage of other vehicles and he shall take care to provide a clear view of the standing vehicle as far as possible to the front and rear.

§ 192.22 *Emergency signals; disabled vehicle.* Whenever any motor vehicle is disabled upon the traveled portion of any highway or the shoulder thereof, when lighted lamps are required, except in a municipality where there is sufficient highway lighting to make it clearly discernible to persons and vehicles on the highway at a distance of 500 feet, the following requirements shall be observed:

(a) The driver of such vehicle shall immediately place on the traveled portion of the highway at the traffic side of the disabled vehicle, a lighted fusee, a lighted red electric lantern, or a red emergency reflector.

(b) Except as provided in paragraphs (c) and (d) of this section, as soon thereafter as possible, but in any event within the burning period of the fusee, the driver shall place three liquid-burning flares (pot torches), or three red electric lanterns, or three red emergency reflectors on the traveled portion of the highway in the following order:

(1) One at a distance of approximately 100 feet from the disabled vehicle in the center of the traffic lane occupied by such vehicle and toward traffic approaching in that lane;

(2) One at a distance of approximately 100 feet in the opposite direction from the disabled vehicle in the center of the traffic lane occupied by such vehicle; and

(3) One at the traffic side of the disabled vehicle, not less than 10 feet to the front or rear thereof. If a red electric lantern or red emergency reflector has been placed on the traffic side of the vehicle in accordance with paragraph (a) of this section, it may be used for this purpose.

(c) If disablement of any motor vehicle shall occur within 500 feet of a curve, crest of a hill, or other obstruction to view, the driver shall so place the warning signal in that direction as to afford ample warning to other users of the highway, but in no case less than 100 feet nor more than 500 feet from the disabled vehicle.

(d) If gasoline or any other flammable or combustible liquid or gas seeps or leaks from a fuel container of a motor vehicle disabled or otherwise stopped upon a highway, no emergency warning signal producing a flame shall be lighted or placed except at such a distance from any such liquid or gas as will assure the prevention of a fire or explosion.

§ 192.23 *Emergency signals; stopped or parked vehicles.* Whenever for any cause other than disablement or necessary traffic stops, any motor vehicle is stopped upon the traveled portion of any highway, or shoulder thereof, during the time lights are required except within a municipality where there is sufficient highway lighting to make clearly discernible persons and vehicles on the highway at a distance of 500 feet, the following requirements shall be observed:

(a) The driver of such vehicle shall immediately place on the traveled portion of the highway at the traffic side of the vehicle, a lighted fusee, a lighted red electric lantern, or a red emergency reflector (see § 192.22 (d)).

(b) If the stop is to exceed 10 minutes, the driver shall place emergency signals as required and in the manner prescribed by § 192.22 (b), (c), and (d).

§ 192.24 *Emergency signals; flame-producing.* No driver shall attach or permit any person to attach a lighted fusee or other flame-producing emergency signal to any part of a motor vehicle.

§ 192.25 *Emergency signals; dangercus cargoes.* No driver shall use or permit the use of any flame-producing emergency signal for protecting any motor vehicle transporting explosives, Class A or Class B; any cargo tank motor vehicle used for the transportation of any flammable liquid or flammable compressed gas, whether loaded or empty; or any motor vehicle using compressed gas as a motor fuel. In lieu thereof, red electric lanterns or red emergency reflectors shall be used, the placement of which shall be in the same manner as prescribed in § 192.22 (b) and (c).

§ 192.26 *Red flags; stopped vehicles.* During the time when lighted lamps are not required, whenever a motor vehicle is disabled, stopped, or parked upon the traveled portion of any highway or shoulder thereof, except within the business or residence district of a municipality, the driver of such vehicle shall place red flags as follows:

(a) One at a distance of approximately 100 feet from the vehicle in the center of the traffic lane occupied by such vehicle toward traffic approaching in that lane;

(b) One at a distance of approximately 100 feet in the opposite direction from the vehicle in the center of the traffic lane occupied by such vehicle.

SUBPART D—USE OF LIGHTED LAMPS AND REFLECTORS

§ 192.30 *Lighted lamps; moving vehicles.* No motor vehicle shall be driven upon the highway unless the lamps required by Part 193 of this subchapter are lighted:

(a) During the period of one-half hour after sunset to one-half hour before sunrise;

(b) During any other time when there is not sufficient light to render clearly discernible persons and vehicles on the highway at a distance of 500 feet.

§ 192.31 *Lighted lamps; stopped or parked vehicles.* Whenever any motor vehicle is parked or stopped upon the highway within a business or residence district of a municipality, whether attended or unattended, during the times mentioned in § 192.30, at least one white or amber light shall be displayed on the traffic side of the motor vehicle, visible from a distance of 500 feet to the front of the motor vehicle and at least one red light visible from a distance of 500 feet to the rear; and head-lamp beam shall be dimmed or depressed, if in use: *Provided, however,* That no lamps need be lighted if there is sufficient highway lighting to make clearly discernible persons and vehicles at a distance of 500 feet, unless lighted lamps are required by local regulations.

§ 192.32 *Upper and lower head-lamp beams.* During the times when lighted lamps are required, every driver shall obey the following:

(a) *Upper beam.* He shall use the upper distribution of light when there is no on-coming vehicle within 500 feet: *Provided, however,* That a lower distribution of light may be used when fog, dust, or other atmospheric conditions make it desirable for reasons of safety, and when within the confines of municipalities where there is sufficient light to render clearly discernible persons and vehicles on the highway at a distance of 500 feet ahead;

(b) *Lower beam.* When within 500 feet of an on-coming vehicle, he shall use a distribution of light or composite beam so aimed that the glaring rays are not projected into the eyes of the on-coming driver and such distribution of light shall also be used when following another vehicle within 500 feet.

§ 192.33 *Obscured lamps or reflectors.* No motor vehicle shall be driven when any of the required lamps or reflectors are obscured by the tailboard, by any part of the load, by dirt, or otherwise.

SUBPART E—ACCIDENTS; DUTIES OF DRIVER

§ 192.40 *All accidents.* Every driver of a motor vehicle involved in an accident from which there results injury to or death of any person or persons, or property damage of any kind, regardless of the amount, shall:

(a) Stop immediately;

(b) Take all necessary precaution to prevent further accident at the scene;

(c) Render all reasonable assistance to injured persons (movement of injured persons by a driver should not be undertaken if likely to cause further injury);

(d) Give to any person demanding the same, his name and address, the name and address of the motor carrier for whom he is then driving, the state tag registration number of the vehicle involved, and if requested, exhibit his chauffeur's or operator's license;

(e) Report all details of the accident as soon as practicable after its occurrence to the motor carrier then using his services.

§ 192.41 *Striking unattended vehicle.* If a moving vehicle strikes a vehicle standing unattended upon a highway, the driver of the former shall immediately stop and endeavor to locate the custodian of the unattended vehicle, and if his reasonable effort so to do is unsuccessful, the driver of the vehicle doing the striking shall place securely and conspicuously in or on the unattended vehicle his name and address and that of the motor carrier for whom he is then driving.

SUBPART F—FUELING PRECAUTIONS

§ 192.50 *Ignition of fuel; prevention.* No driver or any employee of a motor carrier shall:

(a) Fuel a motor vehicle with the engine running, except when it is necessary to run the engine to fuel the vehicle;

(b) Smoke or expose any open flame in the vicinity of a vehicle being fueled;

(c) Fuel a motor vehicle unless the nozzle of the fuel hose is continuously in contact with the intake pipe of the fuel tank;

(d) Permit, insofar as practicable, any other person to engage in such activities as would be likely to result in fire or explosion.

§ 192.51 *Reserve fuel.* No supply of fuel for the propulsion of said motor vehicle or for the operation of accessories shall be carried on any motor vehicle except in a properly mounted fuel tank or tanks.

§ 192.52 *Buses; fueling.* No bus shall be fueled in a closed building with passengers aboard. The fueling of buses when passengers are being carried shall be reduced to the minimum number of times necessary during such transportation.

SUBPART G—PROHIBITED PRACTICES

§ 192.60 *Unauthorized persons not to be transported.* Unless specifically authorized in writing to do so by the motor carrier under whose authority the motor vehicle is being operated, no driver shall transport any person or permit any person to be transported on any motor vehicle other than a bus. When such authorization is issued, it shall state the name of the person to be transported, the points where the transportation is to begin and end, and the date upon which such authority expires. No written authorization, however, shall be necessary for the transportation of:

(a) Employees or other persons assigned to a vehicle by a motor carrier;

(b) Any person transported when aid is being rendered in case of an accident or other emergency;

(c) An attendant delegated to care for livestock.

This section shall not apply to the operation of motor vehicles controlled and operated by any farmer and used in the transportation of agricultural commodities or products thereof from his farm or in the transportation of supplies to his farm.

§ 192.61 *Driving by unauthorized person.* Except in case of emergency, no driver shall permit a motor vehicle to which he is assigned to be driven by any person not authorized to drive such vehicle by the motor carrier in control thereof.

§ 192.62 *Bus driver; distraction.* No driver while driving a bus shall engage in any unnecessary conversation or other activities tending to distract his attention from the operation of such vehicle.

§ 192.63 *Towing or pushing loaded buses.* No disabled bus with passengers aboard shall be towed or pushed; nor shall any person use or permit to be used a bus with passengers aboard for the purpose of towing or pushing any disabled vehicle, except in such circumstances where the hazard to passengers would be increased by observance of the foregoing provisions of this section, and then only in traveling to the nearest point where the safety of the passengers is assured.

§ 192.64 *Riding within closed vehicles without proper exits.* No person shall ride within the closed body of any motor vehicle unless there are means on the inside thereof of obtaining exit. Said means shall be in such condition as to permit ready operation by the occupant.

§ 192.65 *Sleeper berth; transfer from or to.* No person shall transfer to or from a sleeper berth while a motor vehicle is in motion unless by means of a direct access between the cab and the berth.

§ 192.66 *Carbon monoxide; use of vehicle when detected.* No person shall dispatch or drive any motor vehicle or permit any passengers thereon, when the following conditions are known to exist, until such conditions have been remedied or repaired:

(a) Where an occupant has been affected by carbon monoxide;

(b) Where carbon monoxide has been detected in the interior of the vehicle;

(c) When a mechanical condition of the vehicle is discovered which would be likely to produce a hazard to the occupants by reason of carbon monoxide.

§ 192.67 *Heater, flame-producing; on vehicle in motion.* No open flame heater used in the loading or unloading of the commodity transported shall be in operation while the vehicle is in motion.

§ 192.68 *Motive power not to be disengaged.* No motor vehicle shall be driven with the source of motive power disengaged from the driving wheels except when such disengagement is necessary to stop or to shift gears.

PART 193—PARTS AND ACCESSORIES NECESSARY FOR SAFE OPERATION

SUBPART A—GENERAL

Sec.
193.1 Compliance.
193.2 Additional equipment and accessories.

SUBPART B—LIGHTING DEVICES, REFLECTORS, AND ELECTRICAL EQUIPMENT

193.11 Lamps and reflectors, small buses and trucks.
193.12 Lamps and reflectors, large buses and trucks.
193.13 Lamps and reflectors, truck-tractors.
193.14 Lamps and reflectors, large semi-trailers and full trailers.
193.15 Lamps and reflectors, small semi-trailers and full trailers.
193.16 Lamps and reflectors, pole trailers.
193.17 Lamps and reflectors, combinations in driveaway-towaway operations.
193.18 Lamps on motor vehicles with projecting loads.
193.19 Tail lamps and stop lamps on new vehicles.
193.20 Clearance lamps to indicate extreme width and height.
193.21 Side-marker lamps combined with clearance lamps.
193.22 Combining tail and stop lamps.
193.23 Lighting devices to be electric.
193.24 Requirements for head lamps and auxiliary road lighting lamps.
193.25 Requirements for clearance, side-marker, and other lamps.
193.26 Requirements for reflectors.
193.27 Wiring specifications.
193.28 Wiring to be protected.
193.29 Grounds.
193.30 Battery installation.
193.31 Overload protective devices.
193.32 Detachable electrical connections.
193.33 Wiring, installation.

SUBPART C—BRAKES

193.40 Adequacy of brakes.
193.41 Parking brakes.
193.42 Brakes required on all wheels.
193.43 Breakaway brakes.
193.44 Front brake lines, protection.
193.45 Brake tubing and hose, adequacy.
193.46 Brake tubing and hose connections.
193.47 Brake lining.
193.48 Brakes to be operative.
193.49 Single valve to operate all brakes.
193.50 Reservoirs required.
193.51 Warning devices.
193.52 Brake performance.

SUBPART D—GLAZING AND WINDOW CONSTRUCTION

193.60 Glazing in specified openings.
193.61 Window construction.
193.62 Window obstructions.
193.63 Window markings.

SUBPART E—FUEL SYSTEMS

193.65 Fuel systems.
193.66 Liquefied petroleum gas fuel systems.

SUBPART F—COUPLING DEVICES AND TOWING METHODS

193.70 Coupling devices and towing methods, except for driveaway-towaway operations.
193.71 Coupling devices and towing methods, driveaway-towaway operations.

SUBPART G—MISCELLANEOUS PARTS AND ACCESSORIES

193.75 Tires.
193.76 Sleeper berths.

AUTHORITY: §§ 193.1 to 193.96 issued under 49 Stat. 546, as amended; 49 U. S. C. 304.

SUBPART A—GENERAL

§ 193.1 *Compliance.* Every motor carrier, and its officers, agents, drivers, representatives and employees directly concerned with the installation and maintenance of equipment and accessories, shall comply and be conversant with the requirements and specifications of this part, and no motor carrier shall operate any motor vehicle, or cause or permit it to be operated, unless it is equipped in accordance with said requirements and specifications.

§ 193.2 *Additional equipment and accessories.* Nothing contained in Parts 190–197 of this subchapter shall be construed to prohibit the use of additional equipment and accessories, not inconsistent with or prohibited by Parts 190–197 of this subchapter, provided such equipment and accessories do not decrease the safety of operation of the motor vehicles on which they are used.

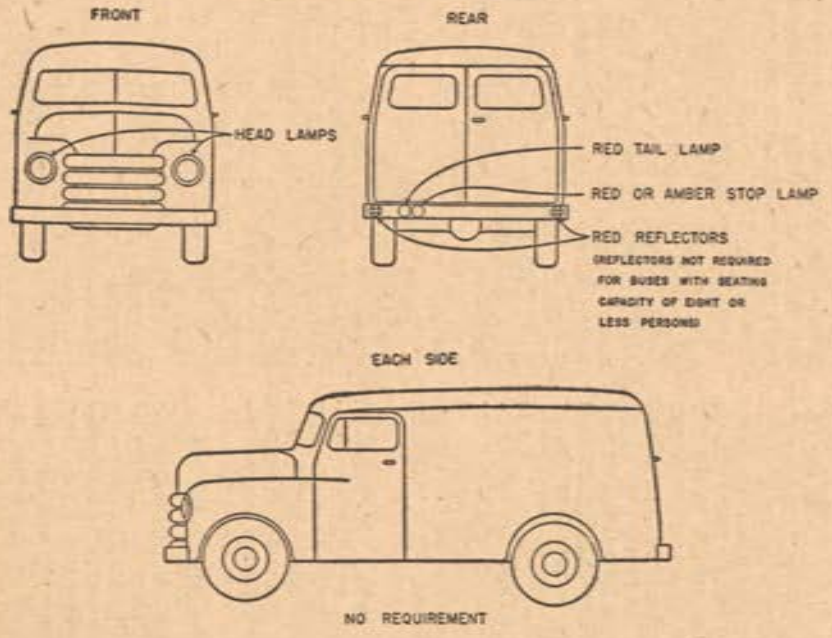
SUBPART B—LIGHTING DEVICES, REFLECTORS, AND ELECTRICAL EQUIPMENT

§ 193.11 *Lamps and reflectors, small buses and trucks.* Every bus or truck less than 80 inches in overall width shall be equipped as follows:

(a) On the front, two head lamps;

(b) On the rear, one red tail lamp; one red or amber stop lamp; two red reflectors, one at each side, except that the reflector requirement shall not apply to buses having a seating capacity of eight or less persons.

(Diagram to illustrate § 193.11.)



NOTE: Diagrams show clearance and side-marker lamps as mounted separately. Clearance and side-marker lamps may be combined § 193.21.

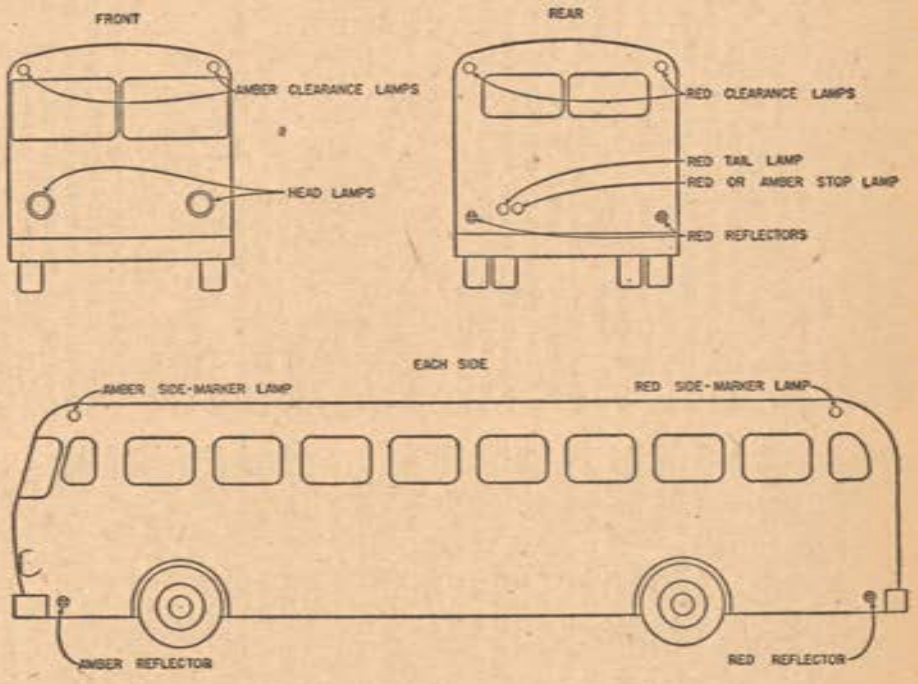
§ 193.12 *Lamps and reflectors, large buses and trucks.* Every bus or truck 80 inches or more in overall width shall be equipped as follows:

(a) On the front, two head lamps; two amber clearance lamps, one at each side;

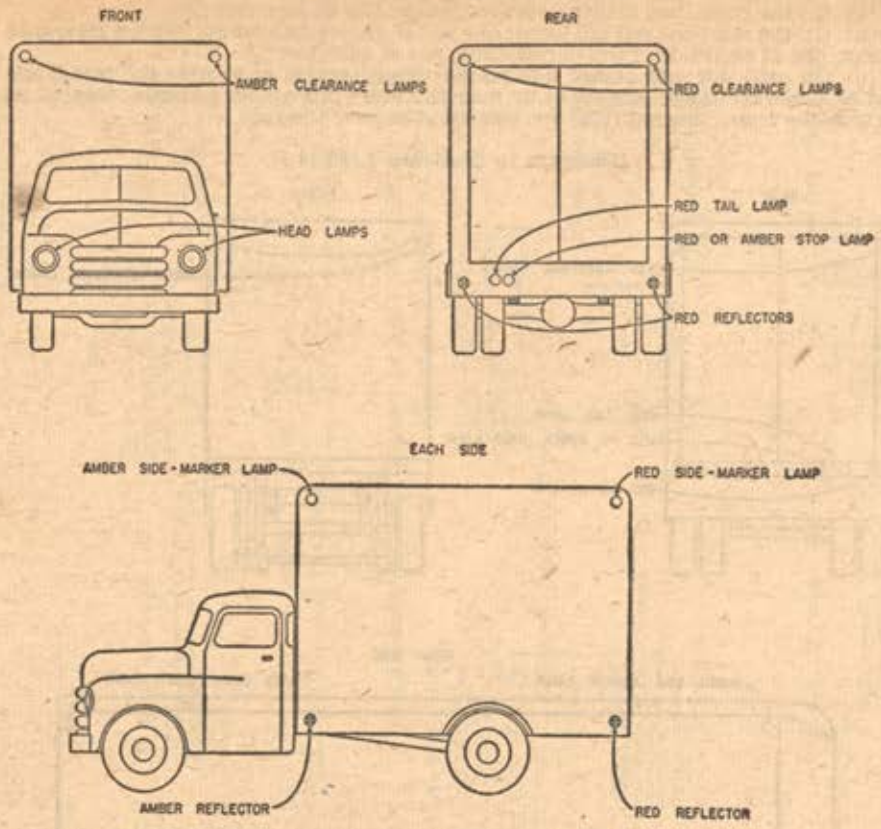
(b) On the rear, one red tail lamp; one red or amber stop lamp; two red clearance lamps, one at each side; two red reflectors; one at each side;

(c) On each side, one amber side-marker lamp, located at or near the front; one red side-marker lamp, located at or near the rear; one amber reflector, located at or near the front; one red reflector, located at or near the rear.

(Bus diagram to illustrate § 193.12.)



(Truck diagram to illustrate § 193.12.)

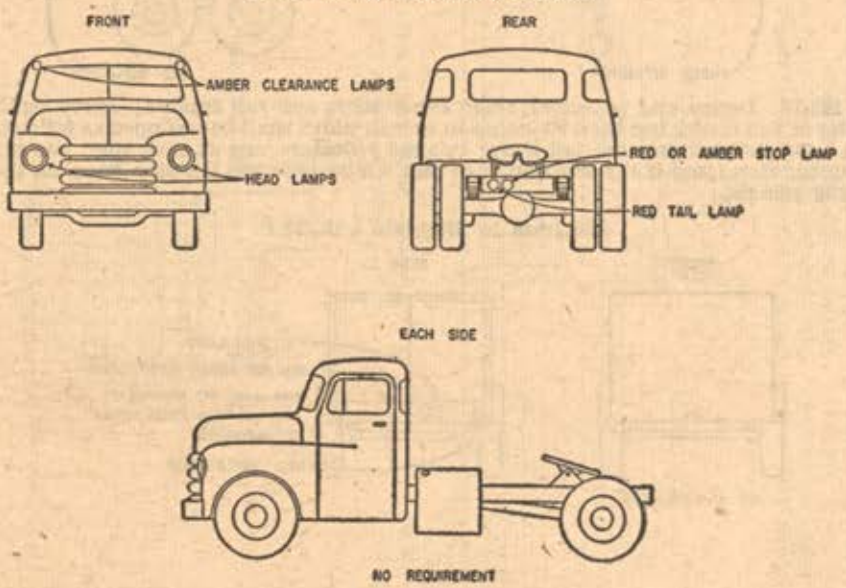


§ 193.13 *Lamps and reflectors—truck-tractors.* Every truck-tractor shall be equipped as follows:

(a) On the front, two head lamps; two amber clearance lamps, one at each side;

(b) On the rear, one red tail lamp; one red or amber stop lamp.

(Diagram to illustrate § 193.13.)



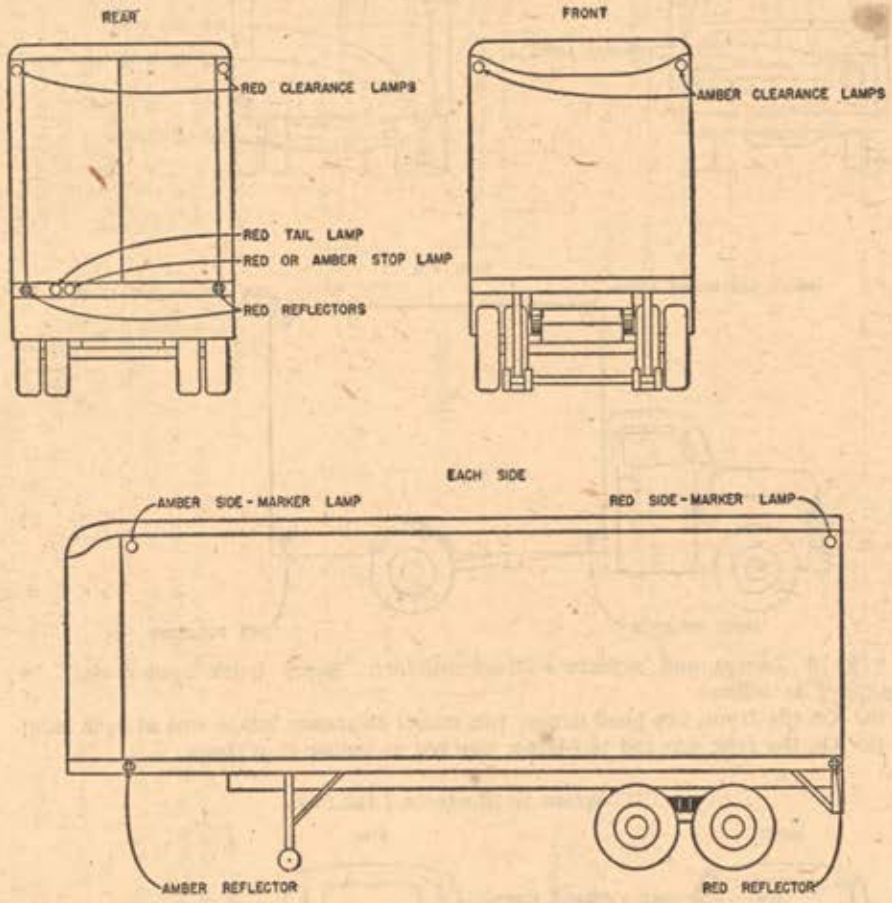
§ 193.14 *Lamps and reflectors, large semitrailers and full trailers.* Every semitrailer or full trailer 80 inches or more in overall width shall be equipped as follows:

(a) On the front, two amber clearance lamps, one at each side;

(b) On the rear, one red tail lamp; one red or amber stop lamp; two red clearance lamps, one at each side; two red reflectors, one at each side;

(c) On each side, one amber side-marker lamp, located at or near the front; one red side-marker lamp, located at or near the rear; one amber reflector, located at or near the front; one red reflector, located at or near the rear.

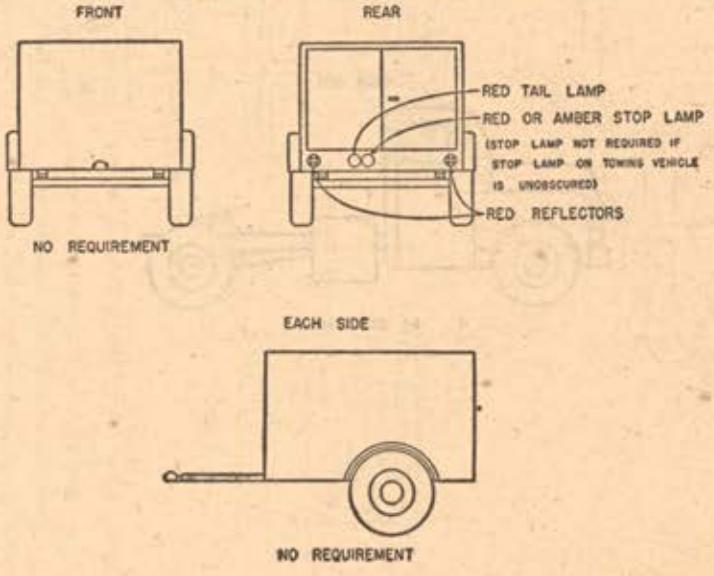
(Diagram to illustrate § 193.14.)



§ 193.15 *Lamps and reflectors, small semitrailers and full trailers.* Every semitrailer or full trailer less than 80 inches in overall width shall be equipped as follows:

(a) On the rear, one red tail lamp; two red reflectors, one at each side; one red or amber stop lamp if the semitrailer or full trailer obscures the stop lamp on the towing vehicle.

(Diagram to illustrate § 193.15.)

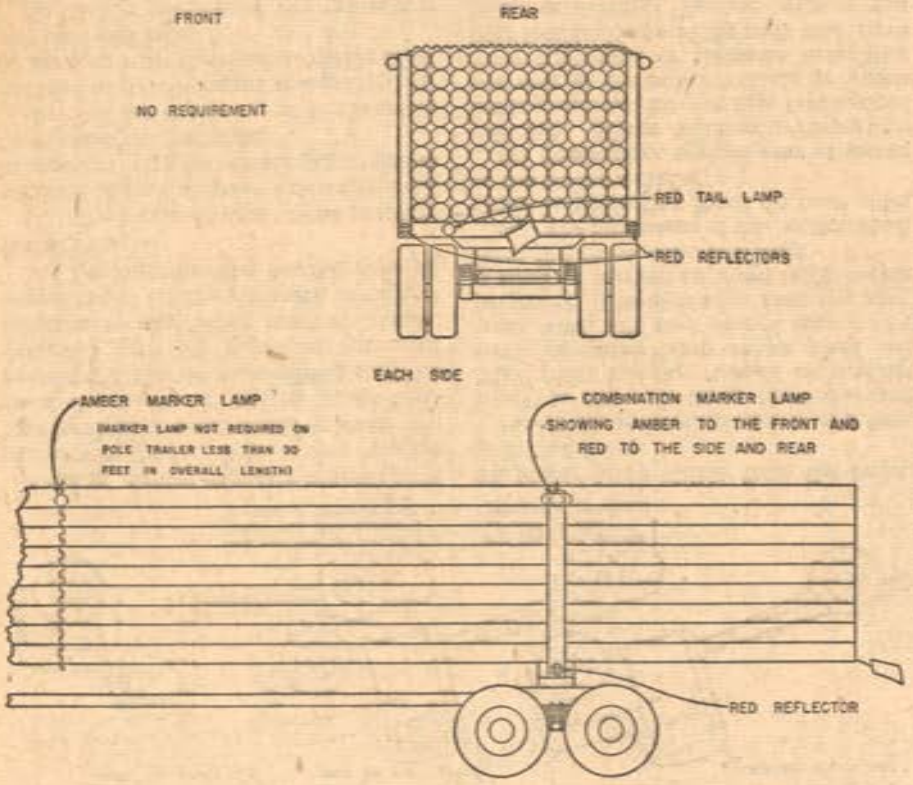


§ 193.16 *Lamps and reflectors, pole trailers.* Every pole trailer shall be equipped as follows:

(a) On the rear, one red tail lamp; two red reflectors, one at each side, placed to indicate extreme width of the pole trailer;

(b) On each side, on the rearmost support for the load, one combination marker lamp showing amber to the front and red to the side and rear, mounted to indicate maximum width of the pole trailer; one red reflector, located at or near the rear; and on pole trailers 30 feet or more in overall length, an amber marker lamp on each side near the center.

(Diagram to illustrate § 193.16.)



§ 193.17 *Lamps and reflectors, combinations in driveaway-towaway operations.* Combinations of motor vehicles engaged in driveaway-towaway operations shall be equipped as follows:

(a) On the towing vehicle:

(1) On the front, two head lamps and two amber clearance lamps, one at each side;

(2) On each side and near the front, one amber side-marker lamp;

(3) On the rear, one red tail lamp; one red or amber stop lamp.

(b) On the towed vehicle of a tow-bar combination, the towed vehicle of a single saddle-mount combination and on the rearmost towed vehicle of a double saddle-mount combination:

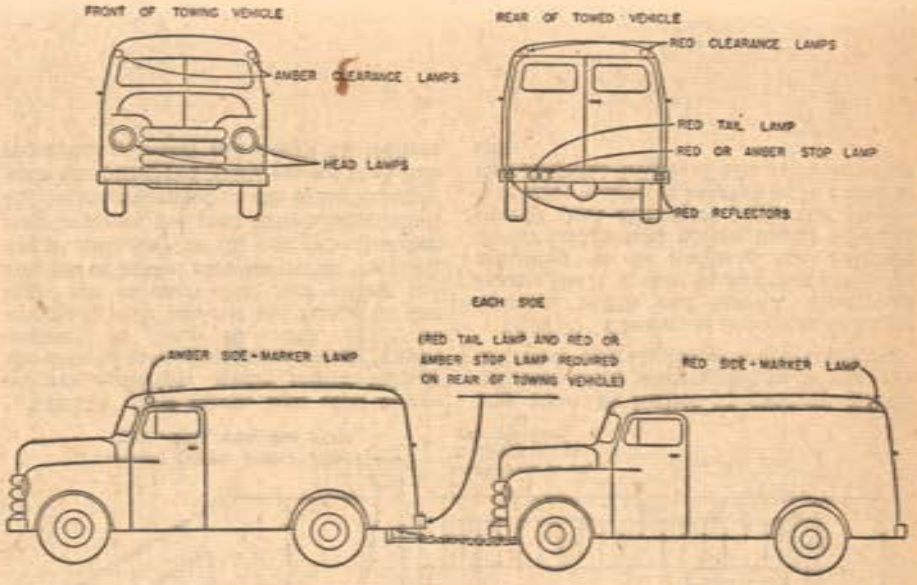
(1) On each side, and near the rear, one red side-marker lamp;

(2) On the rear, one red tail lamp, two red clearance lamps; one at each side; one red or amber stop lamp; two red reflectors, one at each side.

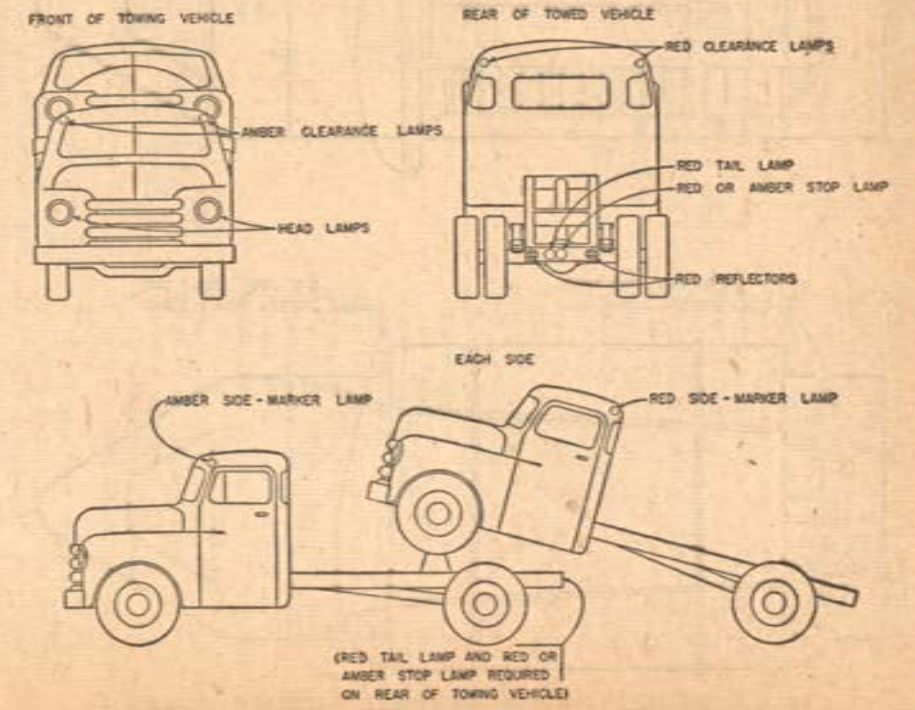
(c) On the first saddle-mounted vehicle of a double saddle-mount combination:

(1) On each side, and near the rear, one amber side-marker lamp.

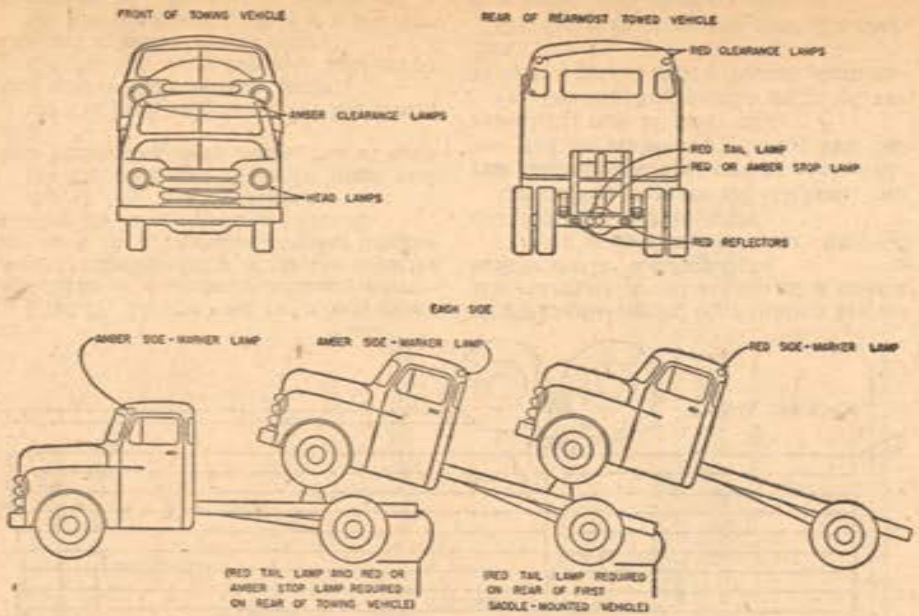
(Tow-bar diagram to illustrate § 193.17.)



(Single-saddle-mount diagram to illustrate § 193.17.)



(Double-saddle-mount diagram to illustrate § 193.17.)



§ 193.18 *Lamps on motor vehicles with projecting loads.* Any motor vehicle transporting a load which extends beyond the width or having projections beyond the rear of such vehicle shall be equipped with the following lamps in addition to any other required lamps. (See § 193.87 for flags on such vehicles.)

(a) Loads projecting beyond sides of motor vehicles:

(1) The foremost edge of the projecting load at its outermost extremity shall be marked with an amber lamp visible from the front and side;

(2) The rearmost edge of the projecting load at its outermost extremity shall be marked with a red lamp visible from the rear and side;

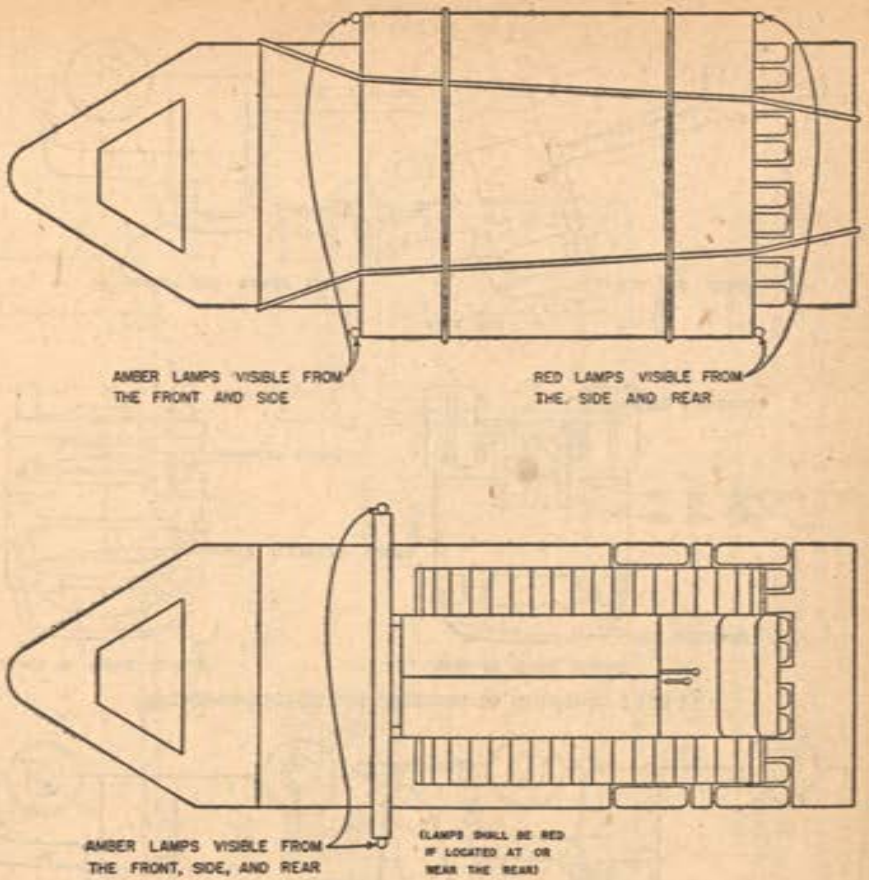
(3) If any portion of the projecting load extends beyond either the foremost or rearmost edge, it shall be marked with an amber lamp visible from the front, side, and rear;

(4) If the projecting load is of a type which is not over three feet measured from front to rear, it shall be marked with an amber lamp visible from the front, side, and rear except that if the projection is located at or near the rear, it shall be marked by a red lamp visible from the front, side, and rear.

(5) The provisions of this section shall apply to projecting loads on both sides of the motor vehicle.

(b) Projections beyond rear of motor vehicles. Motor vehicles transporting loads which extend over four feet beyond the rear of the motor vehicle or which have tailboards or tailgates extending over four feet beyond the body shall have these projections marked with a red lamp or lamps visible from the sides and rear.

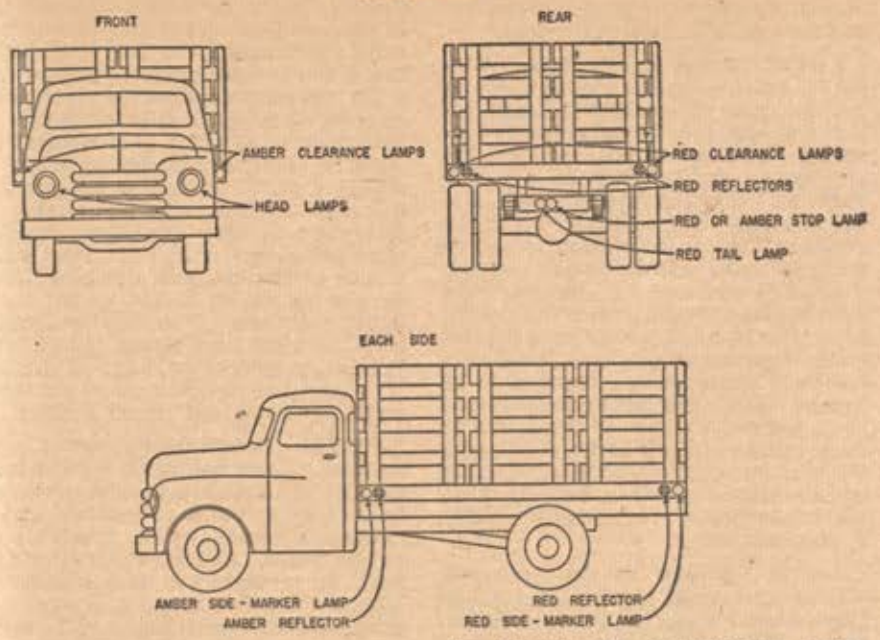
(Diagrams to illustrate § 193.18 for two types of projecting loads.)



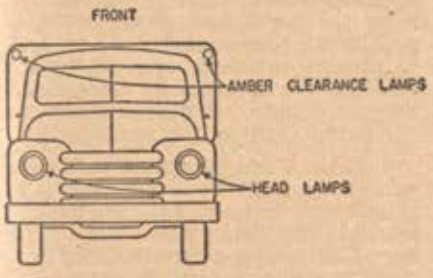
§ 193.19 *Tail lamps and stop lamps on new vehicles.* Every motor vehicle the date of manufacture of which is subsequent to June 30, 1953, shall be equipped with two red tail lamps on the rear, one at each side, and either (a) two red or amber stop lamps on the rear, one at each side, or (b) one red or amber stop lamp on the rear which lamp shall not be incorporated in the same housing with any other red lamp, except that this requirement shall not apply to trailers less than 80 inches in over-all width, vehicles being transported in driveaway-towaway operations, or truck-tractors.

§ 193.20 *Clearance lamps to indicate extreme width and height.* Clearance lamps shall, so far as is practicable, be mounted as to indicate the extreme width and height of the motor vehicle; except that clearance lamps on truck-tractors shall be so located as to indicate the extreme width of the truck-tractor cab.

(Diagram to illustrate § 193.20 for mounting of lamps on vehicles without permanent top or sides.)



(Diagram to illustrate § 193.20 for mounting of front clearance lamps on truck-tractors with sleeper cabs.)



§ 193.21 *Side-marker lamps combined with clearance lamps.* Side-marker lamps may be in combination with clearance lamps and may use the same light source.

§ 193.22 *Combining tail and stop lamps.* Except as required by § 193.19, tail lamps may be incorporated in the same housing with stop lamps so long as the requirements for each are fulfilled.

§ 193.23 *Lighting devices to be electric.* Lighting devices shall be electric, except that red liquid-burning lanterns may be used on the end of loads in the nature of poles, pipes, and ladders projecting to the rear of the motor vehicle.

§ 193.24 *Requirements for head lamps and auxiliary road lighting lamps*—(a) *Head lamps and auxiliary road lighting lamps; mounting.* Head lamps or auxiliary road lighting lamps shall be mounted so that the beams are readily adjustable, both vertically and horizontally, and the mounting shall be such that the aim is not readily disturbed by ordinary conditions of service.

(b) *Head lamps and auxiliary road lighting lamps required.* Every bus, truck, or truck-tractor shall be equipped with two head lamps with an upper and lower distribution of light selectable at the driver's will, or with two single-beam head lamps supplemented by two auxiliary single-beam head lamps furnishing, respectively, an upper and lower distribution of light, also selectable at the driver's will.

(c) *Head lamps; aiming and intensity of.* Head lamps shall be constructed and installed so as to provide adequate and reliable illumination and shall conform to the appropriate specification set forth in the SAE Recommended Practices [1] or SAE Standards [1] for "Electric Headlamps for Motor Vehicles" or "Sealed-Beam Headlamp Units for Motor Vehicles."

§ 193.25 *Requirements for clearance, side-marker and other lamps*—(a) *Clearance, side-marker, and other lamps; mounting.* Except for temporary side-marker and clearance lamps on motor vehicles being transported in driveaway-towaway operations, temporary electric lamps on projecting loads, and temporary marker lamps on pole trailers, all lamps shall be permanently and securely mounted in workmanlike manner on a permanent part of the motor vehicle. All clearance lamps and side-marker lamps must be firmly attached.

(b) *Clearance, side-marker, tail, and projecting load-marker lamps; visibility.* Clearance, side-marker, tail, and projecting load-marker lamps shall be so mounted as to be capable of being seen at all distances between 500 feet and 50 feet under clear atmospheric conditions during the time lamps are required to be lighted. The light from front clearance lamps shall be visible to the front, that from side-marker lamps to the side, that from rear clearance and tail lamps to the rear, and that from projecting load-marker lamps from those directions required by § 193.18. This section shall not be construed to apply to lamps which are obscured by another unit of a combination of vehicles.

(c) *Clearance, side-marker, tail, and projecting load-marker lamps; specifications.* Clearance, side-marker, tail, and projecting load-marker lamps shall be constructed and installed so as to provide an adequate and reliable warning signal. These lamps shall conform to the appropriate requirements set forth in the SAE Standards [1] for "Clearance, Side-Marker, Identification, and Parking Lamps" or the SAE Standard [1] for "Tail Lamps," and projecting electric load-marker lamps shall conform to the same specifications as clearance and side-marker lamps.

(d) *Stop lamps; operation and visibility.* All stop lamps on a motor vehicle or combination of motor vehicles shall be actuated upon application of any of the service brakes except that stop lamps on a towing vehicle need not be actuated when service brakes are applied to the towed vehicle or vehicles only. Stop lamps shall be constructed and installed so as to provide a clear, adequate, and reliable warning signal and shall conform to the requirements set forth, in the SAE Standard [1] for "Stop Lamps."

(e) *Lighting devices; color.* The color of exterior lighting devices shall be as follows:

(1) All front clearance lamps, and all side-marker lamps except the one on each side at or near the rear shall when lighted display an amber color;

(2) No lighted red lamp of any character shall be displayed at any place other than on the rear or on the sides near the rear, except that this prohibition shall not apply to any school bus when operating as such nor to the rear lens of a double-face directional signal;

(3) All rear clearance lamps, the side-marker lamp on each side at or near the rear, and any other lamps mounted on the rear or on the sides near the rear shall display a red color except as permitted by § 193.16, and subparagraphs (4), (5), and (6) of this paragraph;

(4) The stop lamp or lamps on the rear of any motor vehicle shall be red or amber;

(5) Back-up lamp or lamps showing white to amber to the rear may be mounted on the rear of any vehicle if such lamp or lamps can be lighted only when the vehicle is in reverse gear or when a pilot lamp readily visible to the driver is burning to indicate that such back-up lamp or lamps are lighted;

(6) No provision of this section shall be so construed as to prohibit the use of any white lamp or lamps for the purpose of illuminating license plates or destination signs on buses;

(7) No provision of this section shall be so construed as to prohibit the use of motor vehicles in combination if such motor vehicles are severally lighted as required by §§ 193.11 to 193.17, inclusive;

(8) Wherever reference is made in Parts 190–197 of this subchapter to the colors "red," "amber," or "white," said colors shall be as prescribed in the SAE

[1] Wherever reference is made in these regulations to SAE Standards or SAE Recommended Practices, they shall be as found in the 1952 edition of the "SAE Hand Book" published by the Society of Automotive Engineers, 29 West Thirty-ninth Street, New York 18, N. Y.

Standard [1] "Color Specification for Electric Lamps."

(f) *Lighting devices to be steady-burning.* All exterior lighting devices shall be of the steady-burning type except directional signals on any vehicle, warning lamps on school buses when operating as such, and warning lamps on emergency and service vehicles authorized by State or local authorities.

§ 193.26 *Requirements for reflectors.*—(a) *Mounting.* Reflectors required by Parts 190–197 of this subchapter shall be mounted upon the motor vehicle at a height of not less than 24 inches nor more than 60 inches above the ground on which the motor vehicle stands, except that reflectors shall be mounted as high as practicable on motor vehicles which are so constructed as to make compliance with the 24-inch requirement impractical. They shall be so installed as to perform their function adequately and reliably and except for temporary reflectors required for vehicles in driveaway-towaway operations, all reflectors shall be permanently and securely mounted in workmanlike manner so as to provide the maximum of stability, and the minimum likelihood of damage. Required reflectors otherwise properly mounted may be securely installed on flexible strapping or belting provided that under conditions of normal operation they reflect light in the required directions. Required temporary reflectors mounted on motor vehicles during the time they are in transit in any driveaway-towaway operation must be firmly attached.

(b) *Specifications.* All required reflectors shall conform to the requirements for Class A reflectors contained in the SAE Recommended Practice [1] "Reflex Reflectors".

(c) *Color.* All reflectors on the rear and those nearest to the rear on the sides, except those referred to in paragraph (d) of this section, shall reflect a red color; all other reflectors, except those referred to in paragraph (d) of this section, shall reflect an amber color, provided that this requirement shall not be construed to prohibit the use of motor vehicles in combination if such motor vehicles are severally equipped with reflectors as required by §§ 193.11 to 193.17, inclusive. Wherever reference is made to the colors "red" or "amber" for reflectors, such colors shall correspond to the requirements in SAE Standard [1] "Color Specification for Electric Lamps".

(d) *Retroreflective surfaces.* Retroreflective surfaces other than required reflectors, may be used provided:

(1) Designs do not resemble traffic control signs, lights, or devices, except that straight edge striping resembling a barricade pattern may be used.

(2) Designs do not tend to distort the length and/or width of the motor vehicle.

(3) Such surfaces shall be at least three inches from any required lamp or reflector unless of the same color as such lamp or reflector.

(4) No red color shall be used on the front of any motor vehicle.

(5) No provision of this paragraph shall be so construed as to prohibit the use of retroreflective license plates required by State or local authorities.

§ 193.27 *Wiring specifications.* Wiring for both low tension and high tension circuits shall be constructed and installed so as to function reliably and adequately and shall conform to the appropriate requirements in the SAE Standard [1] for "Insulated Cable." Required lamps shall be connected to the source of power with stranded wire. The source of power and the electrical wiring shall be of such size and characteristics that required lamps shall when lighted be capable of being seen at least 500 feet under clear atmospheric conditions during the time lamps are required to be lighted. This shall not be so construed as to prohibit the use of the frame or other metal parts of a motor vehicle as a return ground system provided that for truck-tractor-semitrailer combinations, the truck-tractor is electrically bonded to the semitrailer.

§ 193.28 *Wiring to be protected.* Wiring shall, when possible, be grouped together and protected by non-metallic tape, braid, or other covering capable of withstanding severe abrasion or shall be protected by being enclosed in a metallic sheath or tube. Wiring shall be properly supported. Wiring shall not be so located as to be likely to be charred, overheated, or enmeshed in moving parts. Insofar as is practicable, wiring shall not be adjacent to any part of the fuel system. The edges of all holes in metal through which the wiring passes, unless the wiring is metal-covered, shall be rolled or bushed with a grommet of rubber or other suitable material.

§ 139.29 *Grounds.* The battery ground and trailer return ground connections on a grounded system shall be readily accessible. The contact surfaces of electrical connections shall be clean and free of oxide, paint, or other nonconductive coating.

§ 193.30 *Battery installation.* Every storage battery, unless located in the engine compartment, shall be covered by a fixed part of the motor vehicle or protected by a removable cover or enclosure. Removable covers or enclosures shall be substantial and shall be securely latched or fastened. The storage battery compartment and adjacent metal parts which might corrode by reason of battery leakage shall be painted or coated with an acid-resisting paint or coating and shall have openings to provide ample battery ventilation and drainage. Wherever the cable to the starting motor passes through a metal compartment, the cable shall be protected against grounding by an acid and waterproof insulated bushing. Wherever a battery and a fuel tank are both placed under the driver's seat, they shall be partitioned from each other, and each compartment shall be provided with an independent cover, ventilation, and drainage.

§ 193.31 *Overload protective devices.* The current to all low tension circuits shall pass through overload protective devices except that this requirement shall not be applicable to battery-to-starting motor or battery-to-generator circuits, ignition and engine control circuits, horn circuits, electrically-operated fuel pump circuits, or electric brake circuits. Protective devices for electric circuits on every motor vehicle the date of manufacture of which is subsequent to June 30, 1953, except buses having a seating capacity of eight or less persons or motor vehicles being transported in driveaway-towaway operations, shall be arranged so that either the head lamp circuit or circuits shall not be affected by a short circuit in any of the other lighting circuits on the motor vehicle, or if the head lamp circuit is protected in common with other electrical circuits, the protection device shall be an automatic reset overload circuit breaker.

§ 193.32 *Detachable electrical connections.* Electrical wiring between towing and towed vehicles shall be contained in a cable or cables or entirely within another substantially constructed protective device. All such electrical wiring shall be mechanically and electrically adequate and free of short or open circuits. Suitable provision shall be made in every such detachable connection to afford reasonable assurance against connection in an incorrect manner or accidental disconnection. Detachable connections made by twisting together wires from the towed and towing units are prohibited. Precaution shall be taken to provide sufficient slack in the connecting wire or cable to accommodate without damage all normal motions of the parts to which they are attached.

§ 193.33 *Wiring, installation.* Electrical wiring shall be systematically arranged and installed in a workmanlike manner. All detachable wiring, except temporary wiring connections for driveaway-towaway operations, shall be attached to posts or terminals by means of suitable cable terminals which conform to the SAE Standard [1] for "Cable Terminals". The number of wires attached to any post shall be limited to the number which such post was designed to accommodate. The presence of bare, loose, dangling, chafing, or poorly-connected wires is prohibited.

SUBPART C—BRAKES

§ 193.40 *Adequacy of brakes.* Every bus, truck, truck-tractor, and combination of motor vehicles, except as provided in § 193.42, shall be equipped with brakes adequate to control the movement of, and to stop and to hold, such vehicle or combination of vehicles. Two separate means of brake application shall be provided. One such braking means shall be a mechanical parking brake which shall employ a ratchet and pawl or other suitable locking and releasing mechanism. If these two separate means of applying the brakes are connected in any way, they shall be so constructed that failure of any one part of the operating mechanism shall not leave the vehicle without operative brakes.

§ 193.41 *Parking brakes.* Every bus, truck, or truck-tractor shall be equipped with parking brakes capable of locking

[1] See footnote to § 193.25 (c).

the rear driving wheels and adequate under any condition of loading to hold, to the limit of traction of such braked wheels, such vehicle or combination of vehicles to which such motor vehicle may be attached on any grade on which said vehicle or combination of vehicles is to be operated. The operating controls of such parking brakes shall be independent of the operating controls of the service brakes.

§ 193.42 *Brakes required on all wheels.* Every motor vehicle shall be equipped with brakes acting on all wheels, except:

(a) Any full trailer, semitrailer, or pole trailer of a gross weight not exceeding 3,000 pounds: *Provided*, That the gross weight of any such full trailer or pole trailer, no part of the load of which rests upon the towing vehicle, shall not exceed 40 percent of the gross weight of the towing vehicle and that the gross weight of any such semitrailer or pole trailer part of the load of which rests upon the towing vehicle, shall not exceed 40 percent of the gross weight of the towing vehicle when connected to such semitrailer or pole trailer;

(b) Any vehicle being towed in a driveway-towaway operation, provided the combination of vehicles is capable of complying with the performance requirements of § 193.52; only such brakes on the vehicle or vehicles being towed in driveaway-towaway operations need be operative as may be necessary to insure compliance with the performance requirements of § 193.52.

(c) Trucks and truck-tractors having three or more axles need not have brakes on the front wheels.

§ 193.43 *Breakaway brakes.* Every full trailer, semitrailer, and pole trailer required to be equipped with brakes, except motor vehicles engaged in driveaway-towaway operations, shall be equipped with brakes of such a character as to be automatically applied upon breakaway from the towing vehicle, and means shall be provided to maintain application of the brakes on the trailer in such case for at least 15 minutes. When used to tow a trailer equipped with brakes, every truck or truck-tractor, the date of manufacture of which is subsequent to June 30, 1953, shall be equipped with means for providing that in case of breakaway of such trailer, the service brakes on the towing vehicle will be sufficiently operative to stop the towing vehicle.

§ 193.44 *Front brake lines, protection.* On every bus, the date of manufacture of which is subsequent to June 30, 1954, the braking system, if equipped with air brakes, shall be so constructed that in the event any brake line forward of the driver's seat or any line to any of the front wheels is broken, the air supply to any such line can be shut off, by either automatic or manual means. In addition, means shall also be provided in the event of such breakage to enable the driver to apply the brakes on the rear wheels. The means used to apply the brakes on the rear wheels shall be adjacent to but neither forward nor to the left of the driver's seat.

§ 193.45 *Brake tubing and hose, adequacy.* Brake tubing and brake hose shall be:

(a) Designed and constructed of proper material and so installed as to insure proper continued functioning;

(b) Sufficiently long and flexible as to accommodate without damage all normal motions of the parts to which they are attached;

(c) Suitably secured against chafing, kinking, or other mechanical injury; and

(d) Brake hose shall be so constructed as to insure adequate and reliable functioning and shall conform to the appropriate specification set forth in the SAE Standards[1] for "Hydraulic Brake Hose", "Air-Brake Hose", or "Vacuum Brake Hose".

§ 193.46 *Brake tubing and hose connections.* All connections for air, vacuum, or hydraulic braking systems shall:

(a) Be adequate in material and construction to insure proper continued functioning;

(b) Be designed, constructed, and installed so as to insure, when properly connected, an attachment free of leaks, constrictions, or other defects;

(c) Have suitable provision in every detachable connection to afford reasonable assurance against accidental disconnection;

(d) Have the vacuum brake engine manifold connection at least ⅜ inches in diameter.

§ 193.47 *Brake lining.* The brake lining on every motor vehicle shall be so constructed and installed as not to be subject to excessive fading and grabbing and shall be adequate in thickness, means of attachment, and physical characteristics to provide for safe and reliable stopping of the motor vehicle.

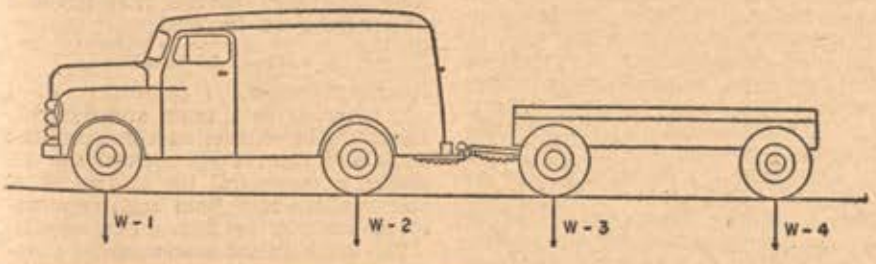
§ 193.48 *Brakes to be operative.* All brakes with which motor vehicles are equipped shall be operative at all times except as provided in § 193.42 (b) and except brakes on disabled vehicles being towed; but means may be used for reducing the braking effort on the front wheels of any bus, truck, or truck-tractor or of removing the braking effort on the front wheels of any three axle truck or truck-tractor provided that the means for reducing or removing the braking effort shall be used only when operating under adverse road conditions such as wet, snowy, or icy roads.

§ 193.49 *Single valve to operate all brakes.* Every motor vehicle, the date of manufacture of which is subsequent to June 30, 1953, which is equipped with power brakes, shall have the braking system so arranged that one application valve shall when applied operate all the service brakes on the motor vehicle or combination of motor vehicles. This requirement shall not be construed to prohibit motor vehicles from being equipped with an additional valve to be used to operate the brakes on a trailer or trailers or as provided in § 193.44. This rule shall not be applicable to driveaway-towaway operations unless the brakes on such operations are designed to be operated by a single valve.

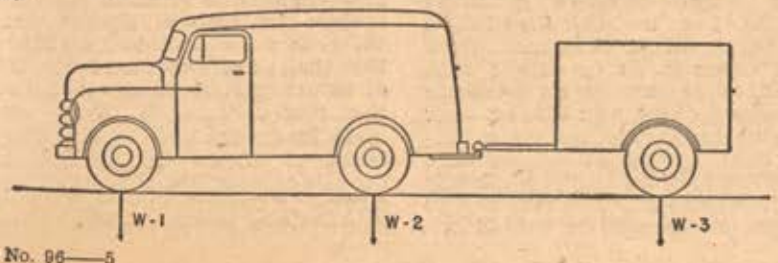
§ 193.50 *Reservoirs required.* Every bus, truck, and truck-tractor, the date of manufacture of which is subsequent to June 30, 1953, which is equipped with an air or vacuum brake system, shall be equipped with reserve capacity or a reservoir sufficient to insure a brake application capable of stopping the vehicle within the stopping distance requirements of § 193.52 in the event the engine stops. No such reserve capacity or reservoir shall be required if the braking system is so designed and installed as to provide for application of the service brakes through hydraulic or mechanical

(Diagrams to illustrate § 193.42 for brake requirements for light trailers.)

(Full trailer or 4-wheel pole trailer of 3,000 pounds gross weight or less must be equipped with brakes if the sum of W–3 and W–4 is greater than 40 percent of the sum of W–1 and W–2.)



(Semitrailer or 2-wheel pole trailer of 3,000 pounds gross weight or less must be equipped with brakes if W–3 is greater than 40 percent of the sum of W–1 and W–2.)



[1] See footnote to § 193.25 (c).

means in event of failure of the air or vacuum system or the source of supply of such systems.

§ 193.51 *Warning devices.* On and after June 30, 1953, every bus, truck, and truck-tractor equipped with an air brake system shall be provided with either an audible or visible warning signal to indicate readily to the driver any loss or lack of air sufficient to prevent the vehicle from being stopped. A gage indicating pressure shall not be deemed to be an adequate means of satisfying this requirement.

§ 193.52 *Brake performance.* Every motor vehicle or combination of motor vehicles shall, upon application of the service brakes, be capable, at all times and under all conditions of loading, of being brought to a stop within a braking distance of 30 feet from a speed of 20 miles per hour when tested on a dry, smooth, level road free from loose material. The braking distance shall be measured by means of an instrument or machine of the decelerometer type capable of being read in feet to stop from 20 miles per hour.

SUBPART D—GLAZING AND WINDOW CONSTRUCTION

§ 193.60 *Glazing in specified openings.* Whenever glazing is used in the windshield, window, door, or any other opening into a bus, truck, or truck-tractor, except vehicles engaged in armored car service, such glazing shall conform to the requirements contained in the "American Standard Safety Code for Safety Glazing Materials for Glazing Motor Vehicles Operating on Land Highways, Z26.1 1950" of the American Standards Association, Inc., 70 East 45th Street, New York 17, N. Y.

§ 193.61 *Window construction*—(a) *Windows in trucks and truck-tractors.* Every truck and truck-tractor, except vehicles engaged in armored car service, shall have, in addition to the area provided by the windshield, at least one window on each side of the driver's compartment, which windows shall have sufficient area to contain either an ellipse having a major axis of 18 inches and a minor axis of 13 inches, or a rectangular opening with corner arcs of 6-inch maximum radius containing 200 square inches and having a minimum dimension of not less than 13 inches. The major axis of the ellipse and the long axis of the rectangle shall not make an angle of more than 45 degrees with the surface on which the unladen vehicle stands; however, if the cab is designed with a folding door or doors or with clear openings where doors or windows are customarily located, then no windows shall be required in such locations. If the windows are not of the push-out type, the glazed area shall contain the ellipse or rectangle; if of the push-out type, the area of the opening after the movable sash has been removed shall contain the ellipse or rectangle. No area shall be included in this minimum prescribed area unless it is either glazed with laminated safety glass or complies with paragraph (c) of this section.

(b) *Bus windows.* On and after December 31, 1952, every bus, except buses having a seating capacity of eight or less persons shall have, in addition to the area provided by the windshield, adequate means of escape for passengers through windows. The adequacy of such means shall be determined in accordance with the following standards: For each seated pasenger space provided, inclusive of the driver, there shall be at least 67 square inches of glazing if such glazing is not contained in a push-out window; or at least 67 square inches of free opening resulting from opening of a push-out type window. No area shall be included in this minimum prescribed area unless it will provide an unobstructed opening sufficient to contain an ellipse having a major axis of 18 inches and a minor axis of 13 inches or an opening containing 200 square inches formed by a rectangle 13 inches by 17¾ inches with corner arcs of six-inch maximum radius. The major axis of the ellipse and the long axis of the rectangle shall make an angle of not more than 45 degrees with the surface on which the unladen vehicle stands. The area shall be measured either by removal of the glazing if not of the push-out type or of the movable sash if of the push-out type, and it shall be either glazed with laminated safety glass or comply with paragraph (c) of this section.

No less than 40 percent of such prescribed glazing or opening shall be on one side of any bus.

(c) *Push-out window requirements.* Every glazed opening in a truck, truck-tractor, except vehicles engaged in armored car service, or bus, except buses having a seating capacity of eight or less persons, used to satisfy the requirements of paragraphs (a) and (b) of this section, if not glazed with laminated safety glass, shall have a frame or sash so designed, constructed, and maintained that it will yield outwardly to provide the required free opening when subjected to the drop test specified in Test 25 of the American Standard Safety Code referred to in § 193.60. The height of drop required to open such push-out windows shall not exceed the height of drop required to break the glass in the same window when glazed with the type of laminated glass specified in Test 25 of the Code. The sash for such windows shall be constructed of such material and be of such design and construction as to be continuously capable of complying with the above requirement. Such windows shall not be secured by latches, locks, or similar fastening devices, if such devices, when fastened, will require a greater effort to push out the window than is above required.

§ 193.62 *Window obstructions.* Windows, if otherwise capable of complying with § 193.61 (a) and (b), shall not be obstructed by bars or other such means located either inside or outside such windows such as would hinder the escape of occupants unless such bars or other such means are so constructed as to provide a clear opening, at least equal to the opening provided by the window to which it is adjacent, when subjected to the same test specified in § 193.61 (c). The point of application of such test force shall be such as will be most likely to result in the removal of the obstruction.

§ 193.63 *Windows markings.* Each push-out window and any other escape window glazed with laminated safety glass in every bus, except buses having a seating capacity of eight or less persons, shall be identified as such by clearly legible and visible signs, lettering, or decalcomania. Such marking shall include appropriate wording to indicate that it is an escape window and also the method to be used for obtaining emergency exit.

SUBPART E—FUEL SYSTEMS

§ 193.65 *Fuel systems*—(a) *Fuel container location.* No part of any fuel tank or container or intake pipe shall project beyond the overall width of any motor vehicle upon which it is mounted. No part of any fuel tank shall be located forward of the front axle of the power unit upon which it is located, nor shall fuel be supplied to a bus, truck, or truck-tractor engine from a fuel container located on a semitrailer or full trailer.

(b) *Fuel container on bus.* No part of any fuel tank or container or intake pipe shall be located within or above the passenger-carrying portion of any bus unless securely sealed off from such compartment by means of a substantial metal cover. After December 31, 1952, the fuel container, including intake pipes, caps, and vents, on every bus, except busses having a seating capacity of eight or less persons, shall be so designed that, in the event of overturn, the fuel will not be spilled at a rate in excess of one ounce per minute.

(c) *Gravity or syphon feed prohibited.* No fuel system on a motor vehicle shall be so constructed as to permit gravity or syphon feed direct to the carburetor or injector.

(d) *Selector valves.* If a motor vehicle is equipped with a selector control valve for fuel feed from two or more tanks, such valve shall be installed so that either (1) it is in normal reach of the driver so that he can readily operate it without taking his eyes from the road or moving from his customary driving position, or (2) the driver must stop the vehicle and leave his seat in order to operate the valve.

(e) *Liquid fuel tank requirements.* (1) Every liquid fuel tank or container containing fuel for the propulsion of the motor vehicle shall be of substantial construction, free from leaks, and securely attached to the motor vehicle.

(2) Replacement side-mounted gasoline tanks, the date of manufacture of which is subsequent to December 31, 1952, on every motor vehicle, and side-mounted gasoline tanks on every motor vehicle, the date of manufacture of which is subsequent to December 31, 1952, shall comply with the requirements of paragraphs (f) to (k) inclusive, of this section.

(3) Except for side-mounted gasoline tanks, all replacement gasoline tanks, the date of manufacture of which is subsequent to December 31, 1952, on every motor vehicle, and all gasoline fuel tanks

on every truck or truck-tractor, the date of manufacture of which is subsequent to December 31, 1952, shall comply with the requirements of paragraphs (f) to (k) inclusive, of this section, except paragraphs (g), (h) and (j) (1).

(f) *Liquid fuel tank construction*—(1) *Material.* Material used in the construction of the tank and its fittings shall be suitable for the purpose intended.

(2) *Joints.* Joints shall be closed only by arc, gas, seam, or spot welding, brazing, or silver soldering.

(3) *Fittings.* The tank shall be provided with suitable flanges or spuds for the assembly of all fittings.

(4) *Threads.* Threads on all fittings shall be American (National) Standard Taper Pipe Thread or SAE Standard[1] Short Dryseal Taper Pipe Thread. There shall not be less than four full threads in engagement in any fitting.

(5) *Drains and bottom fittings.* Drains and other bottom fittings shall not extend more than ¾ inch below the lowest part of the tank and shall be designed or guarded to minimize their being torn loose. All drain fittings shall be so designed and located as to permit complete drainage. The drain shall be located in a suitable flange or spud.

(6) *Fuel discharge line.* The fitting through which the fuel is drawn from the tank shall be located above the normal full line of the tank.

(7) *Excess flow valve.* When pressure devices are used to force fuel from the tank, means shall be provided to prevent the continued flow of fuel in the event the fuel feed line is broken.

(8) *Fill-pipe design.* The fill-pipe shall be designed and located so as to minimize the probability of its being torn loose in the event of an accident. The fill-pipe and vents on any motor vehicle having a total fuel capacity in excess of 25 gallons shall be so designed and constructed as to permit filling at a rate of at least 20 gallons per minute without spillage.

(9) *Air vent.* Every fuel tank shall be equipped with an air vent of a nonspill type (ball check or equivalent). The air vent may be mounted separately or combined with the filler cap or safety vent.

(10) *Safety vents, fusible.* The fuel tank or tanks on any motor vehicle having a total fuel capacity in excess of 25 gallons shall be provided with a fusible safety vent or vents which shall be so designed as to limit the pressure rise in the tank under any fire condition to a maximum of 50 pounds per square inch gage. The vent area shall be sufficient to prevent a rise in pressure in the tank of more than 10 percent of the release pressure of the safety vent or vents when the tank is subjected to a fire of any magnitude. If but one fusible safety vent is provided, it shall be located in the top of the tank; if more than one fusible safety vent is provided at least one shall be in the top of the tank.

(g) *Liquid fuel tank capacity markings.* The tank shall be marked with its liquid capacity and shall be provided with means to indicate that it shall not be filled to more than 95 percent of its total capacity.

(h) *Liquid fuel tank identity markings.* Each tank shall be marked to identify its manufacturer and to indicate the approximate date of manufacture by lot number or otherwise.

(i) *Liquid fuel tank installation*—(1) *General requirement.* The tank shall be mounted in accordance with the best commercial practice.

(2) *Location of fill-pipe.* The fill-pipe opening shall be outside the cab or body and must be so located as to minimize the likelihood of spillage of fuel during the filling process on the exhaust system or battery.

(j) *Liquid fuel tank tests*—(1) *Drop test on corner of tank.* The tank when filled with water equal in weight to that of its fuel capacity shall withstand without leakage a drop of 30 feet falling so as to strike squarely on one corner on concrete or equivalent surface which shall not rupture under the impact. The fill-pipe and cap, fuel gage sending device, and the air intake and safety vents shall not leak more than 1 ounce of water per minute as a result of this test.

(2) *Drop test on fill-pipe.* The tank when filled with water equal in weight to that of its fuel capacity shall withstand without leakage a drop of 10 feet falling so as to strike squarely on the fill-pipe on concrete or equivalent surface which shall not rupture under the impact. The fill-pipe or cap shall not leak more than 1 ounce of water per minute as a result of this test.

(3) *Safety vent test.* The safety vent, or vents, shall limit the rise in internal pressure in the tank to a maximum of 50 lbs. per square inch gage when the tank is filled to three-fourths of a rated capacity with standard fuel and placed in inverted position with the fuel feed outlet connection plugged when an enveloping flame is applied to the tank with sufficient intensity to produce an internal fuel temperature rise of 6 to 8 degrees F per minute starting from a fuel temperature of 50 to 80 degrees F. Neither the tank, fill-pipe, fuel gage, air intake vent, nor any other opening except blown fusible plugs shall leak more than one ounce of fuel per minute after having been subjected to these conditions. Other types of tests or calculations may be employed to determine compliance with this requirement if a comparable result is obtained.

(4) *Rupture test.* The tank and all appurtenances including the fill-pipe, cap, fuel gage, and air intake vent shall withstand without rupture an internal hydrostatic pressure of 150 percent of the maximum at which the safety vent is required to release.

(5) *Spillage test.* At ordinary room temperature the tank when filled to capacity with its normal fuel and turned through an angle of 150 degrees from its normal position, with outlet pipe plugged, shall not spill or leak fuel at a rate greater than 1 ounce per minute. The fill-pipe, cap, fuel gage outlet, air intake vent, safety vent, and any other openings shall withstand this test.

(k) *Liquid fuel tank certification.* Every gasoline fuel tank designed and constructed to comply with these requirements shall be plainly and permanently marked with the date of manufacture and a certification of the manufacturer that it complies with such requirements. The certification shall, for the type of tank to which it is applicable, contain the words "Meets ICC requirements—side-mounted—gasoline" or "Meets ICC requirements—not side-mounted—gasoline" or words of similar meaning.

§ 193.66 *Liquefied petroleum gas fuel systems.* Every motor vehicle utilizing liquefied petroleum gas for its propulsion shall be equipped with a fuel system which complies with Division IV, May, 1951 edition of the "Standards for the Storage and Handling of Liquefied Petroleum Gas" of the National Fire Protection Association, 60 Batterymarch Street, Boston 10, Massachusetts.

SUBPART F—COUPLING DEVICES AND TOWING METHODS

§ 193.70 *Coupling devices and towing methods, except for driveaway-towaway operations*—(a) *Fifth wheel mounting.* The lower half of every fifth wheel mounted on any truck-tractor or dolly shall be securely affixed to the frame thereof by U-bolts of adequate size, securely tightened, or by other means providing at least equivalent security. Such U-bolts shall not be of welded construction. The installation shall be such as not to cause cracking, warping, or deformation of the frame. Adequate means shall be provided positively to prevent the shifting of the lower half of a fifth wheel on the frame to which it is attached.

(b) *Fifth wheel parts, securing.* The upper half of every fifth wheel shall be fastened to the motor vehicle with at least the security required for the securing of the lower half to a truck-tractor or dolly.

(c) *Fifth wheel, locking.* Locking means shall be provided in every fifth wheel mechanism, including adapters when used, so that the upper and lower halves may not be separated without the operation of a positive manual release. A release mechanism operated by the driver from the cab shall be deemed to meet this requirement. On fifth wheels designed and constructed as to be readily separable, the fifth wheel locking devices shall apply automatically on coupling for any motor vehicle the date of manufacture of which is subsequent to December 31, 1952.

(d) *Tow-bar.* Every full trailer shall be equipped with a tow-bar and means of attaching the tow-bar to the towing and towed units which shall be structurally adequate for any weight drawn, properly and securely mounted, without excessive slack but with sufficient play to allow for universal action of the connection, and provided with a suitable locking means to prevent accidental separation of the towed and towing motor vehicles. The mounting of the trailer hitch (pintle-eye or equivalent mechanism) on the towing motor vehicle shall include sufficient reinforcement or bracing of the frame to provide sufficient

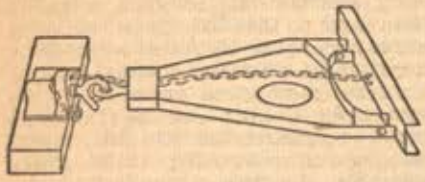
[1] See footnote to § 193.25 (c).

strength and rigidity and to prevent undue distortion of the frame.

(e) *Tracking.* Coupling devices shall be so designed, constructed, and installed, and the vehicles in the combination shall be so designed and constructed, as to insure that any motor vehicle or motor vehicles being towed on level, smooth, paved surface will follow in the path of the towing vehicle without shifting or swerving from side to side over three inches to each side of the path of the towing vehicle when it is moving in a straight line.

(f) *Safety chains.* Every full trailer shall be coupled with a safety chain or chains (stay chains or cables) to the motor vehicle by which it is to be towed. No more slack shall be left in safety chains or cables than shall be necessary to permit proper turning. Chains or cables shall be so connected to the towed and towing vehicle and to the tow-bar as to prevent the tow-bar from dropping to the ground in the event the tow-bar fails. The means of attachment to both the towing and towed vehicles shall be capable of developing the full capacity of the safety chains or cables. Each chain or cable shall have an ultimate strength at least equal to the gross weight of the full trailer being towed. Every full trailer and every dolly used to convert a semitrailer to a full trailer, the date of manufacture of which is subsequent to December 31, 1952, shall be equipped with a chain or cable the major portion of which is approximately in line with the center line of the tow-bar.

(Diagram to illustrate § 193.70 (f) for safety chains on new vehicles.)



(g) *Location of lower half of fifth wheel.* The lower half of every fifth wheel shall be so located that, for any condition of loading, the relationship of position of king pin to the rear axle or axles of the towing motor vehicle results in proper distribution of the total gross weight of the motor vehicles to the axles and does not unduly interfere with the steering, braking, or maneuvering of the towing motor vehicle, or otherwise contribute to unsafe operation of the motor vehicles comprising the combination.

(h) *Location of upper half of fifth wheel.* The upper half of every fifth wheel shall be so located as to accomplish proper distribution of weight to the axles and safe movement of the combination of motor vehicles in all turning maneuvers.

§ 193.71 *Coupling devices and towing methods, driveaway-towaway operations.*—(a) *Number in combination.* No more than two vehicles in combination shall be towed by saddle-mounts. No more than one motor vehicle shall be towed by tow-bar.

(b) *Carrying vehicles on towing vehicle.* When adequately and securely attached by means equivalent in security to that provided in paragraph (j) (2) of this section, a motor vehicle or motor vehicles may be full-mounted on the structure of a towing vehicle engaged in any driveaway-towaway operation.

(c) *Carrying vehicles on towed vehicles.* No full-mounted motor vehicle shall be towed by a tow-bar. No motor vehicle shall be full-mounted on a motor vehicle towed by means of a saddle-mount unless the center line of the king pin or equivalent means of attachment of such towed vehicle is located forward of the center line of the rear axle of the towing vehicle; and unless a perpendicular to the ground from the center of gravity of the full-mounted vehicle lies forward of the center line of the rear axle of the saddle-mounted vehicle. No motor vehicle shall be full-mounted on either of the vehicles being towed by means of double saddle-mount.

(d) *Bumper tow-bars on heavy vehicles prohibited.* Tow-bars of the type which depend upon the bumpers as a means of transmitting forces between the vehicles shall not be used to tow a motor vehicle weighing more than 5,000 pounds.

(e) *Front wheels of saddle-mounted vehicles restrained.* A motor vehicle towed by means of a saddle-mount shall have the motion of the front wheels restrained if under any condition of turning of such wheels they will project beyond the widest part of either the towed or towing vehicle.

(f) *Vehicles to be towed in forward position.* Unless the steering mechanism is adequately locked in a straight-forward position, all motor vehicles towed by means of a saddle-mount shall be towed with the front end mounted on the towing vehicle.

(g) *Means required for towing.* No motor vehicle shall be towed in driveaway-towaway operations by means other than a tow-bar or saddle-mount connection which shall meet the requirements of paragraphs (h), (i), (j), (k), (l) and (m) of this section. For the purposes of these regulations, coupling devices such as those used for towing house trailers and employing ball and socket connections shall be considered as tow-bars.

(h) *Requirements for tow-bars.* Tow-bars shall comply with the following requirements:

(1) *Tow-bars, structural adequacy and mounting.* Every tow-bar shall be structurally adequate and properly installed and maintained. To insure that it is structurally adequate, it must, at least, meet the requirements of the following table:

Gross weight of towed vehicle (pounds) [1]	Longitudinal strength in tension and compression [2]		Strength as a beam (in any direction-concentrated load at center) [2] [3]
	All tow-bars	New tow-bars acquired and used by a motor carrir after Sept. 30, 1948	
	Pounds	*Pounds*	*Pounds*
Less than 5,000	3,000	6,500	3,000
5,000 and over	6,000	(4)	(4)
Less than 10,000			
10,000 and over	9,000	(4)	(4)
Less than 15,000			

[1] The required strength of tow-bars for towed vehicles of 15,000 pounds and over gross weight and of new tow-bars acquired and used after Sept. 30, 1948, for towed vehicles of 5,000 pounds and over gross weight shall be computed by means of the following formulae: Longitudinal strength = gross weight of towed vehicle x 1.3. Strength as a beam = gross weight of towed vehicle x 0.6.

[2] In testing, the whole unit shall be tested with all clamps, joints, and pins so mounted and fastened as to approximate conditions of actual operation.

[3] This test shall be applicable only to tow-bars which are, in normal operation, subjected to a bending moment, such as tow-bars for house trailers.

(2) *Tow-bars, jointed.* The tow-bar shall be so constructed as to freely permit motion in both horizontal and vertical planes between the towed and towing vehicles. The means used to provide the motion shall be such as to prohibit the transmission of stresses under normal operation between the towed and towing vehicles, except along the longitudinal axis of the tongue or tongues.

(3) *Tow-bar fastenings.* The means used to transmit the stresses to the chassis or frames of the towed and towing vehicles may be either temporary structures or bumpers or other integral parts of the vehicles: *Provided, however,* That the means used shall be so constructed, installed, and maintained that, when tested as an assembly, failure in such members shall not occur when the weakest new tow-bar which is permissible under paragraph (h) (1) of this section is subjected to the tests given therein.

(4) *Means of adjusting length.* On tow-bars, adjustable as to length, the means used to make such adjustment shall fit tightly and not result in any slackness or permit the tow-bar to bend. With the tow-bar supported rigidly at both ends and with a load of 50 pounds at the center, the sag, measured at the center, in any direction shall not exceed 0.25 inch under any condition of adjustment as to length.

(5) *Method of clamping.* Adequate means shall be provided for securely fastening the tow-bar to the towed and towing vehicles.

(6) *Tow-bar connection to steering mechanism.* The tow-bar shall be provided with suitable means of attachment to and actuation of the steering mechanism, if any, of the towed vehicle. The attachment shall provide for sufficient angularity of movement of the front

wheels of the towed vehicle so that it may follow substantially in the path of the towing vehicle without cramping the tow-bar. The tow-bar shall be provided with suitable joints to permit such movement.

(7) *Tracking.* The tow-bar shall be so designed, constructed, maintained, and mounted as to cause the towed vehicle to follow substantially in the path of the towing vehicle. Tow-bars of such design or in such condition as to permit the towed vehicle to deviate more than 3 inches to either side of the path of a towing vehicle moving in a straight line are prohibited.

(8) *Passenger-car trailer couplings.* Trailer couplings used for driveaway-towaway operations of passenger car trailers shall comply with the SAE Recommended Practice [1] "Passenger Car Trailer Couplings".

(9) *Marking new tow-bars.* Every new tow-bar acquired and used in driveaway-towaway operations by a motor carrier after September 30, 1948, shall be plainly marked with the following certification of the manufacturer thereof (or words of equivalent meaning):

"This tow-bar complies with the requirements of the Interstate Commerce Commission for (maximum gross weight for which tow-bar is manufactured) vehicles.
Manufactured ----------
(Month and year)
by ----------
(Name of manufacturer)

(10) *Safety chains and cables.* (i) The towed vehicle shall be connected to the towing vehicle by means of two safety chains or cables. The tensile strength of such chains or cables and their means of attachment to the vehicles shall be at least equivalent to the corresponding longitudinal strength for new tow-bars required in the table of paragraph (h) (1) of this section. The required strength shall be the combined strength of the combination of chains and cables.

(ii) The chains or cables shall be crossed and attached to the vehicles near the points of bumper attachments to the chassis of such vehicles. The length of chain used shall be no more than necessary to permit free turning of the vehicles. The chains shall be attached to the tow-bar at the point of crossing or as close thereto as is practicable.

(i) *Saddle-mount definitions.* The following terms, when used in this part, mean:

(1) *Saddle-mount.* "Saddle-mount" means a device, designed and constructed as to be readily demountable, used in driveaway-towaway operations to perform the functions of a conventional fifth wheel.

(2) *Upper-half.* "Upper-half" of a "saddle-mount" means that part of the device which is securely attached to the towed vehicle and maintains a fixed position relative thereto, but does not include the "king-pin."

(3) *Lower-half.* "Lower-half" of a "saddle-mount" means that part of the device which is securely attached to the towing vehicle and maintains a fixed position relative thereto but does not include the "king-pin."

(4) *King-pin.* "King-pin" means that device which is used to connect the "upper-half" to the "lower-half" in such manner as to permit relative movement in a horizontal plane between the towed and towing vehicles.

(j) *Requirements for upper-half of saddle-mounts.* The upper-half of any saddle-mount shall comply with the following requirements:

(1) *Upper-half connection to towed vehicle.* The upper-half shall be securely attached to the frame or axle of the towed vehicle by means of U-bolts or other means providing at least equivalent security.

(2) *U-bolts or other attachments.* U-bolts used to attach the upper-half to the towed vehicle shall be made of steel rod, free of defects, so shaped as to avoid at any point a radius of less than one inch; provided, however, that a lesser radius may be utilized if the U-bolt is so fabricated as not to cause more than 5 percent reduction in cross-sectional area at points of curvature, in which latter event the minimum radius shall be 1/16 inch. U-bolts shall have a diameter not less than required by the following table:

Weight in pounds of heaviest towed vehicle	Diameter of U-bolts in inches		
	Double saddle-mount		Single saddle-mount [1]
	Front mount	Rear mount	
Up to 5,000	0.5625	0.500	0.500
5,000 and over	.625	.5625	0.5625

[1] If a vehicle is full-mounted on the single saddle-mounted vehicle, the total weight of the two vehicles being towed shall govern. If other devices are used to accomplish the same purposes as U-bolts, they shall have at least equivalent strength of U-bolts made of mild steel. Cast iron shall not be used for clamps or any other holding devices.

(3) *U-bolts and points of support, location.* The distance between the most widely separated U-bolts shall not be less than nine inches. The distance between the most widely separated points where the upper-half supports the towed vehicle shall not be less than nine inches, except that saddle-mounts employing ball and socket joints shall employ a device which clamps the axle of the towed vehicle throughout a length of not less than five inches.

(4) *Cradle-type upper-halves, specifications.* Upper-halves of the cradle-type using vertical members to restrain the towed vehicle from relative movement in the direction of motion of the vehicles shall be substantially constructed and adequate for the purpose. Such cradle-mounts shall be equipped with at least one bolt or equivalent means to provide against relative vertical movement between the upper-half and the towed vehicle. Bolts, if used, shall be at least ½ inch in diameter. Devices using equivalent means shall have at least equivalent strength. The means used to provide against relative vertical motion between the upper-half and the towed vehicle shall be such as not to permit a relative motion of over ½ inch. The distance between the most widely separated points of support between the upper-half and the towed vehicle shall be at least nine inches.

(5) *Lateral movement of towed vehicle.* (i) Towed vehicles having a straight axle or an axle having a drop of less than three inches, unless the saddle-mount is constructed in accordance with paragraph (m) (2) of this section, shall be securely fastened by means of chains or cables to the upper-half so as to insure against relative lateral motion between the towed vehicle and the upper-half. The chains or cables shall be at least 5/16 inch diameter and secured by bolts of at least equal diameter.

(ii) Towed vehicles with an axle with a drop of three inches or more, or connected by a saddle-mount constructed in accordance with paragraphs (m) (2) of this section, need not be restrained by chains or cables provided that the upper-half is so designed as to provide against such relative motion.

(iii) Chains or cables shall not be required if the upper-half is so designed as positively to provide against lateral movement of the axle.

(k) *Requirements for lower-half of saddle mounts.* The lower-half of any saddle-mount shall comply with the following requirements:

(1) *U-bolts or other attachments.* U-bolts used to attach the lower-half to the towing vehicle shall be made of steel rod, free of defects, so shaped as to avoid at any point a radius of less than one inch; provided, however, that a lesser radius may be utilized if the U-bolt is so fabricated as not to cause more than five percent reduction in cross-sectional area at points of curvature, in which latter event the minimum radius shall be 1/16 inch. U-bolts shall have a total cross-sectional area not less than as required by the following table:

Weight in pounds of heaviest towed vehicle	Total cross-sectional area of U-bolts in square inches		
	Double saddle-mount		Single saddle-mount [1]
	Front mount	Rear mount	
Up to 5,000	1.0	0.8	0.8
5,000 and over	1.2	1.0	1.0

[1] If a vehicle is full-mounted on the single saddle-mounted vehicle, the total weight of the two vehicles being towed shall govern. If other devices are used to accomplish the same purposes as U-bolts, they shall have at least equivalent strength of U-bolts made of mild steel. Cast iron shall not be used for any clamps or any other holding devices.

[1] See footnote to § 193.25 (c).

(2) *Shifting.* Adequate provision shall be made by design and installation to provide against relative movement between the lower-half and the towing vehicle especially during periods of rapid acceleration and deceleration. To insure against shifting, designs of the tripod type shall be equipped with adequate and securely fastened hold-back chains or similar devices.

(3) *Swaying.* (i) Adequate provision shall be made by design and installation to provide against swaying or lateral movement of the towed vehicle relative to the towing vehicle. To insure against swaying, lower-halves designed with cross-members attached to but separable from vertical members shall have such cross-members fastened to the vertical members by at least two bolts on each side. Such bolts shall be of at least equivalent cross-sectional area as those requirements for U-bolts for the corresponding saddle-mount as given in the table in paragraph (k) (1) of this section. The minimum distance between the most widely separated points of support of the cross-member by the vertical member shall be three inches as measured in a direction parallel to the longitudinal axis of the towing vehicle.

(ii) The lower-half shall have a bearing surface on the frame of the towing vehicle of such dimensions that the pressure exerted by the lower-half upon the frame of the towing vehicle shall not exceed 200 pounds per square inch under any conditions of static loading. Hardwood blocks or blocks of other suitable material, such as hard rubber, aluminum or brakelining, if used between the lower half and the frame of the towing vehicle shall be at least ½ inch thick, 3 inches wide, and a combined length of 6 inches.

(iii) Under no condition shall the highest point of support of the towed vehicle by the upper-half be more than 24 inches, measured vertically, above the top of the frame of the towing vehicle, measured at the point where the lower-half rests on the towing vehicle.

(4) *Wood blocks.* (i) Hardwood blocks of good quality may be used to build up the height of the front end of the towed vehicle, provided that the total height of such wood blocks shall not exceed 8 inches and not over two separate pieces are placed upon each other to obtain such height; however, hardwood blocks, not over four in number, to a total height not to exceed 14 inches, may be used if the total cross-sectional area of the U-bolts used to attach the lower-half of the towing vehicle is at least 50 percent greater than that required by the table contained in paragraph (k) (1) of this section, or, if other devices are used in lieu of U-bolts they shall provide for as great a resistance to bending as is provided by the larger U-bolts above prescribed.

(ii) Hardwood blocks must be at least 4 inches in width and the surfaces between blocks or block and lower-half or block and upper-half shall be plane and so installed and maintained as to minimize any tendency of the towed vehicle to sway or rock.

(5) *Cross-member, general requirements.* The cross-member, which is that part of the lower-half used to distribute the weight of the towed vehicle equally to each member of the frame of the towing vehicle, if used, shall be structurally adequate and properly installed and maintained adequately to perform this function.

(6) *Cross-member, use of wood.* No materials, other than suitable metals, shall be used as the cross-member, and wood may not be used structurally in any manner that will result in its being subject to tensile stresses. Wood may be used in cross-members if supported throughout its length by suitable metal cross-members.

(7) *Lower-half strength.* The lower-half shall be capable of supporting the loads given in the following table. For the purpose of test, the saddle-mount shall be mounted as normally operated and the load applied through the upper-half:

Weight in pounds of heaviest towed vehicle	Minimum test load in pounds		
	Double saddle-mount		Single saddle-mount [1]
	Front mount	Rear mount	
Up to 5,000	10,000	5,000	5,000
5,000 and over	20,000	10,000	10,000

[1] If a vehicle is full-mounted on the single saddle-mounted vehicle, the total weight of the two vehicles being towed shall govern.

(l) *Requirements for king-pins of saddle-mounts.* The king-pin of any saddle-mount shall comply with the following requirements:

(1) *King-pin size.* King-pins shall be constructed of steel suitable for the purpose, free of defects, and having a diameter not less than required by the following table:

Weight in pounds of heaviest towed vehicle	Diameter of solid king-pin in inches					
	Double saddle-mount				Single saddle-mount [1]	
	Front mount		Rear mount			
	Mild steel	H. T. S. [2]	Mild steel	H. T. S. [2]	Mild steel	H. T. S. [2]
Up to 5,000	1.000	0.875	0.875	0.750	0.875	0.750
5,000 and over	1.250	1.000	1.000	.875	1.000	.875

[1] If a vehicle is full-mounted on the single saddle-mounted vehicle, the total weight of the 2 vehicles being towed shall govern.

[2] High-tensile steel is steel having a minimum ultimate strength of 65,000 pounds per square inch.

If a ball and socket joint is used in place of a king-pin, the diameter of the neck of the ball shall be at least equal to the diameter of the corresponding solid king-pin given in the above table. If hollow king-pins are used, the metallic cross-sectional area shall be at least equal to the cross-sectional area of the corresponding solid king-pin.

(2) *King-pin fit.* If a king-pin bushing is not used, the king-pin shall fit snugly into the upper and lower-halves but shall not bind. Those portions of the upper or lower-halves in moving contact with the king-pin shall be smoothly machined with no rough or sharp edges. The bearing surface thus provided shall not be less in depth than the radius of the king-pin.

(3) *King-pin bushing on new saddle-mounts.* The king-pin of all new saddle-mounts acquired and used after August 24, 1950, shall be snugly enclosed in a bushing at least along such length of the king-pin as may be in moving contact with either the upper or lower-halves. The bearing surface thus provided shall not be less in depth than the radius of the king-pin.

(4) *King-pin to restrain vertical motion.* The king-pin shall be so designed and installed as to restrain the upper-half from moving in a vertical direction relative to the lower-half.

(m) *Additional requirements for saddle-mounts.* Saddle-mounts shall comply with the following requirements:

(1) *Bearing surface between upper and lower-halves.* The upper and lower-halves shall be so constructed and connected that the bearing surface between the two halves shall not be less than 16 square inches under any conditions of angularity between the towing and towed vehicles; provided, however, that saddle-mounts using a ball and socket joint shall have a ball of such dimension that the static bearing load shall not exceed 800 pounds per square inch, based on the projected cross-sectional area of the ball; and further provided, that saddle-mounts having the upper-half supported by ball, taper, or roller-bearings shall not have such bearings loaded beyond the limits prescribed for such bearings by the manufacturer thereof. The upper-half shall rest evenly and smoothly upon the lower-half and the contact surfaces shall be lubricated and maintained so that there shall be a minimum of frictional resistance between the parts.

(2) *New saddle-mounts—angularity.* All new saddle-mounts acquired and used after August 24, 1950, shall provide for angularity between the towing and towed vehicles due to vertical curvatures of the highway. Such means shall not depend upon either the looseness or de-

formation of the parts of either the saddle-mount or the vehicles to provide for such angularity.

(3) *Tracking.* The saddle-mount shall be so designed, constructed, maintained, and installed that the towed vehicle or vehicles will follow substantially in the path of the towing vehicle without swerving. Towed vehicles shall not deviate more than three inches to either side of the path of the towing vehicle when moving in a straight line.

(4) *Prevention of frame bending.* Where necessary, provision shall be made to prevent the bending of the frame of the towing vehicle by insertion of suitable blocks inside the frame channel to prevent kinking. The saddle-mount shall not be so located as to cause deformation of the frame by reason of cantilever action.

(5) *Extension of frame.* No saddle-mount shall be located at a point to the rear of the frame of a towing vehicle.

(6) *Nuts, secured.* All nuts used on bolts, U-bolts, king-pins, or in any other part of the saddle-mount shall be secured against accidental disconnection by means of cotter-keys, lock-washers, double nuts, safety nuts, or equivalent means. Parts shall be so designed and installed that nuts shall be fully engaged.

(7) *Inspection of all parts.* The saddle-mount shall be so designed that it may be disassembled and each separate part inspected for worn, bent, cracked, broken, or missing parts.

(8) *New saddle-mounts, marking.* Every new saddle-mount acquired and used in driveaway-towaway operations by a motor carrier after September 30, 1948 shall have the upper-half and the lower-half separately marked with the following certification of the manufacturer thereof (or words of equivalent meaning):

This saddle-mount complies with the requirements of the Interstate Commerce Commission for vehicles up to 5,000 pounds (or over 5,000 pounds).

Manufactured _____
(Month and year)

by _____
(Name of manufacturer)

SUBPART G—MISCELLANEOUS PARTS AND ACCESSORIES

§ 193.75 *Tires.* Every motor vehicle shall be equipped with tires of adequate capacity to support its gross weight. The tires supporting every axle of a motor vehicle intended to be operated in excess of 25 miles per hour shall be of such size that the sum of their capacity as shown by the following table shall at least equal the total weight on such axle:

Tire size:	Capacity in pounds
7:00 x 20—8 ply	2,500
7:50 x 20—8 ply	2,970
8:25 x 20—10 ply	3,625
9:00 x 20—10 ply	4,315
10:00 x 20—12 ply	5,000
10:00 x 22—12 ply	5,345
10:00 x 24—12 ply	5,690
11:00 x 20—12 ply	5,625
11:00 x 22—12 ply	5,940
11:00 x 24—12 ply	6,250
12:00 x 20—14 ply	6,595
12:00 x 22—14 ply	7,000
12:00 x 24—14 ply	7,405

For tire sizes and ply ratings not shown in this table, the capacity rating in pounds shall be as decided by the Commission and this information shall be available upon inquiry of the Bureau of Motor Carriers, Interstate Commerce Commission, Washington 25, D. C.

No motor vehicle shall be operated on tires which have been worn so smooth as to expose any tread fabric or which have any other defect likely to cause failure. No bus shall be operated on any tire which does not have tread configurations on that part of the tire which is in contact with the road surface. No bus shall be operated with regrooved, recapped, or retreaded tires on the front wheels.

§ 193.76 *Sleeper berths.* Every sleeper berth shall comply with the following requirements:

(a) *Ready exit.* The sleeper berth shall be so designed, constructed, and maintained as to provide the occupant, without the assistance of other persons, with at least two means of ready exit from the motor vehicle on or in which such sleeper berth is mounted; provided, however, that sleeper berths located within the cab need have only one means of ready exit from the sleeper berth. Each required means of exit from the sleeper berth shall have sufficient area to contain an ellipse having a major axis of 24 inches and a minor axis of 16 inches.

(b) *Equipment.* The sleeper berth shall be properly equipped for sleeping and shall be equipped with springs and a mattress or any innerspring or air mattress, or a cellular rubber mattress at least four inches in thickness and adequate bed-clothing and blankets. The sleeper berth shall be so constructed as to permit the ready removal of the mattress and bed-clothing for cleaning purposes.

(c) *Communication with driver.* Unless the sleeper berth is located within the driver's compartment or is provided with a direct entrance thereto means shall be provided to enable the occupant of the berth to communicate with the driver. Such means may include telephones, speaker tubes, buzzers, pull cords, or other mechanical or electrical means.

(d) *Size.* The sleeper berth shall be of such dimensions as to provide at least the following inside dimensions: 72 inches long measured on the center line of the longitudinal axis, 18 inches wide at its center, 18 inches deep at its center, measured from top of mattress. The sleeper berth shall be so constructed as not unduly to hinder the ready entrance or exit of the occupant.

(e) *Ventilation.* Sleeper berths shall be provided with louvers or other means of providing proper ventilation but shall be reasonably tight against dust and rain.

(f) *Protection against exhaust and fuel systems.* Sleeper berths shall not be so located as to permit the ready entrance of gases from the exhaust system. The sleeper berth shall not be so located as to be overheated or damaged by reason of its proximity to the exhaust system. The sleeper berth shall not be so located that defects in the fuel system would result in leakage on or in the sleeper berth.

(g) *Location limited.* No sleeper berth shall be located within the cargo space of a motor vehicle unless such berth is completely and securely compartmentized from the remainder of the cargo space. On and after the effective date of these regulations, no sleeper berth shall be installed in or on any semitrailer or full trailer other than house trailers.

(h) *New vehicles, additional specifications.* Every sleeper berth installed in or on any truck or truck-tractor after December 31, 1952, shall comply with the following requirements, in addition to those set forth in paragraphs (a) to (g) of this section:

(1) *Berth to be part of cab.* Every sleeper berth shall be located within the cab or be immediately adjacent thereto, or be located within the cargo space of a truck. Such sleeper berth shall be securely fixed with relation to the cab and shall be provided with a direct and ready means of exit into the driver's compartment, which exit shall comply with the requirements of paragraph (a) of this section.

(2) *Berths, dimensions.* The sleeper berth shall be so constructed and maintained as to provide, at least, the following inside dimensions: 75 inches long measured on the centerline of the longitudinal axis, and at every point along the 75 inches of required length 21 inches wide and 21 inches deep measured from the top of the mattress.

§ 193.77 *Heaters.* On every bus, and after December 31, 1952, on every other motor vehicle, every heater shall comply with the following reqirements:

(a) *Definition.* The term "heater" means any device or assembly of devices or appliances used to heat the interior of any motor vehicle.

(b) *Prohibited types of heaters.* The installation or use of the following types of heaters is prohibited:

(1) *Exhaust heaters.* Any type of exhaust heater in which the engine exhaust gases are conducted into or through any space occupied by persons or any heater which conducts engine compartment air into any such space.

(2) *Unenclosed flame heaters.* Any type of heater employing a flame which is not fully enclosed, except that such heaters are not prohibited when used for heating the cargo of tank motor vehicles.

(3) *Heaters permitting fuel leakage.* Any type of heater from the burner of which there could be spillage or leakage of fuel upon the tilting or overturning of the vehicle in which it is mounted.

(4) *Heaters permitting air contamination.* Any heater taking air, heated or to be heated, from the engine compartment or from direct contact with any portion of the exhaust system; or any heater taking air in ducts from the outside atmosphere to be conveyed through the engine compartment, unless said ducts are so constructed and installed as to prevent contamination of the air so conveyed by exhaust or engine compartment gases.

(5) *Solid fuel heaters.* Any stove or other heater employing wood, coal, coke, charcoal, or any other solid fuel.

(c) *Heater specifications.* All heaters shall comply with the following specifications:

(1) *Heating elements, protection.* Every heater shall be so located or protected as to prevent contact therewith by occupants unless the surface temperature of the protecting grilles or of any exposed portions of the heaters, inclusive of exhaust stacks, pipes, or conduits shall be lower than would cause contact burns. Adequate protection shall be afforded against igniting parts of the vehicle or burning occupants by direct radiation.

(2) *Moving parts, guards.* Effective guards shall be provided for the protection of passengers or occupants against injury by fans, belts, or any other moving parts.

(3) *Heaters, secured.* Every heater shall be securely fastened to the vehicle in a substantial manner so as to provide against separation from the vehicle during normal usage or in the event the vehicle overturns. Every heater shall be so designed, constructed, and mounted as to minimize the likelihood of disassembly of any of its parts, including exhaust stacks, pipes, or conduits, upon overturn of the vehicle in or on which it is mounted.

(4) *Relative motion between fuel tank and heater.* When either in normal operation or in the event of overturn, there is or is likely to be relative motion between the fuel-tank for a heater and the heater, or between either of such units and the fuel lines between them, a suitable means shall be provided at the point of greatest relative motion so as to allow this motion without causing failure of the fuel lines.

(5) *Operating controls to be protected.* On every bus, except buses having a seating capacity of eight or less persons, means shall be provided to prevent unauthorized persons from tampering with the operating controls. Such means may include remote control by the driver; installation of controls at inaccessible places; control of adjustments by key or keys; enclosure of controls in a locked space, locking of controls, or other means of accomplishing this purpose.

(6) *Heater hoses.* Hoses for all hot water and steam heater systems shall be specifically designed and constructed for that purpose.

(7) *Electrical apparatus.* Every heater employing any electrical apparatus shall be equipped with electrical conductors, switches, connectors, and other electrical parts of ample current-carrying capacity to provide against overheating; any electric motor employed in any heater shall be of adequate size and so located that it will not be overheated; electrical circuits shall be provided with fuses and/or circuit breakers to provide against electrical overloading; and all electrical conductors employed in or leading to any heater shall be secured against dangling, chafing, and rubbing, and shall have suitable protection against any other condition likely to produce short or open circuits.

NOTE: Electrical parts certified as proper for use by Underwriters' Laboratories, Inc., shall be deemed to comply with the foregoing requirements.

(8) *Storage battery caps.* If a separate storage battery is located within the personnel or cargo space, such battery shall be securely mounted and equipped with non-spill filler caps.

(9) *Combustion heater exhaust construction.* Every heater employing the combustion of oil, gas, liquefied petroleum gas, or any other combustible material shall be provided with substantial means of conducting the products of combustion to the outside of the vehicle: *Provided, however,* That this requirement shall not apply to heaters used solely to heat the cargo space of motor vehicles where such motor vehicles are equipped with means specifically designed and maintained to so exhaust the products of combustion to the outside of the motor vehicle that the carbon monoxide concentration will never exceed 0.2 percent. The exhaust pipe, stack, or conduit if required shall be sufficiently substantial and so secured as to provide reasonable assurance against leakage or discharge of products of combustion within the vehicle and, if necessary, shall be so insulated as to make unlikely the burning of charring of parts of the vehicle by radiation or by direct contact. The place of discharge of the products of combustion to the atmosphere and the means of discharge of such products shall be such as to minimize the likelihood of their re-entry into the vehicle under all operating conditions.

(10) *Combustion chamber construction.* The design and construction of any combustion-type heater except cargo space heaters permitted by the proviso of subparagraph (9) of this paragraph and unenclosed flame heaters used for heating cargo of tank motor vehicles shall be such as to provide against the leakage of products of combustion into air to be heated and circulated. The material employed in combustion chambers shall be such as to provide against leakage because of corrosion, oxidation, or other deterioration. Joints between combustion chambers and the air chambers with which they are in thermal and mechanical contact shall be so designed and constructed as to prevent leakage between the chambers and the materials employed in such joints shall have melting points substantially higher than the maximum temperatures likely to be attained at the points of jointure.

(11) *Heater fuel tank location.* Every bus, except those having a seating capacity of eight or less persons, with heaters of the combustion type shall have fuel tanks therefor located outside of and lower than the passenger space. When necessary, suitable protection shall be afforded by shielding or other means against the puncturing of any such tank or its connections by flying stones or other objects.

(12) *Heater, automatic fuel control.* Gravity feed shall not be permitted for heaters using liquid fuels. Heaters using liquid fuels shall be equipped with automatic means for shutting off the fuel or for reducing such flow of fuel to the smallest practicable magnitude, in the event of overturn of the vehicle. Heaters using liquefied petroleum gas as fuel shall have the fuel line equipped with automatic means at the source of supply for shutting off the fuel in the event of separation, breakage, or disconnection of any of the fuel lines between the supply source and the heater.

(13) *"Tell-tale" indicators.* Heaters of the combustion type unless provided with the automatic controls listed in paragraph (c) (14) of this section shall be provided with "tell-tale" means to indicate to the driver that the heater is properly functioning. This requirement shall not apply to heaters used solely for the cargo space in semi-trailers or full trailers.

(14) *Shut-off control.* Automatic means, or manual means if the control is readily accessible to the driver without moving from the driver's seat, shall be provided to shut off the fuel and electrical supply in case of failure of the heater to function for any reason, or in case the heater should function improperly or overheat. This requirement shall not apply to heaters used solely to heat the contents of cargo tank motor vehicles.

(15) *Certification required.* Every combustion-type heater the date of manufacture of which is subsequent to December 31, 1952, shall be marked plainly to indicate the type of service for which such heater is designed and with a certification by the manufacturer that the heater meets the applicable requirements for such use. For example, "Meets I. C. C. Bus Heater Requirements," "Meets I. C. C. Flue-Vented Cargo Space Heater Requirements," etc.

§ 193.78 *Windshield wiper.* (a) Every bus, truck, and truck-tractor, having a windshield, shall be equipped with at least two automatically-operating windshield wiper blades, one on each side of the center line of the windshield, for cleaning rain, snow, or other moisture from the windshield and which shall be in such condition as to provide clear vision for the driver: *Provided, however,* That in driveaway-towaway operations this section shall apply only to the driven vehicle: *And provided further,* That one windshield wiper blade will suffice under this section when such driven vehicle in driveaway-towaway operation has no provision for two such blades.

(b) Every bus, truck, and truck-tractor, the date of manufacture of which is subsequent to June 30, 1953, which depends upon vacuum to operate the windshield wipers, shall be so constructed that the operation of the wipers will not be materially impaired by change in the intake manifold pressure.

§ 193.79 *Defrosting device.* Every bus, truck, and truck-tractor having a windshield, when operating under conditions such that ice, snow, or frost would be likely to collect on the outside of the windshield or condensation on the inside of the windshield, shall be equipped with a device or other means, not manually operated, for preventing or removing such obstructions to the driver's view: *Provided, however,* That this section shall not apply in driveaway-towaway operations when the driven vehicle is a part of the shipment being delivered.

§ 193.80 *Rear-vision mirrors.* Every bus, truck, and truck-tractor shall be equipped with two rear-vision mirrors,

one at each side firmly attached to the outside of the motor vehicle and so located as to reflect to the driver a view of the highway to the rear along both sides of the vehicle: *Provided, however,* That only one outside mirror shall be required, which shall be at the driver's side, on trucks which are so constructed that the driver has a view to the rear by means of an interior mirror: *And provided further,* That in driveaway-towaway operations the driven vehicle shall have at least one mirror furnishing a clear view to the rear.

§ 193.81 *Horn.* Every bus, truck, truck-tractor, and every driven motor vehicle in driveaway-towaway operations shall be equipped with a horn and actuating elements which shall be in such condition as to give an adequate and reliable warning signal.

§ 193.82 *Speedometer.* Every bus, truck, and truck-tractor shall be equipped with a speedometer or tachometer which shall be operative with reasonable accuracy: *Provided, however,* That this requirement shall not apply to any vehicle in driveaway-towaway operations which is part of the shipment being delivered if the driven vehicle is equipped with an effective means of limiting its maximum speed to 45 miles per hour.

§ 193.83 *Exhaust system location.* No part of the exhaust system of any motor vehicle shall be so located as would be likely to result in burning, charring, or damaging the electrical wiring, the fuel supply, or any combustible part of the motor vehicle. The exhaust system of every bus shall discharge to the atmosphere at or within 6 inches forward of the rearmost part of the bus. The exhaust system of every truck and truck-tractor shall discharge to the atmosphere at a location to the rear of the cab or, if the exhaust projects above the cab, at a location near the rear of the cab.

§ 193.84 *Floors.* The flooring in all motor vehicles shall be substantially constructed, free of unnecessary holes and openings, and shall be maintained so as to minimize the entrance of fumes, exhaust gases, or fire. Floors shall not be permeated with oil or gasoline, and shall have the interior surface in good condition.

§ 193.85 *Protection against shifting cargo.* Every motor vehicle carrying cargo such as beams, pipes, sheet steel, and heavy rolls, the nature of which is such that the shifting thereof due to rapid deceleration or accident would be likely to result in penetration or crushing of the driver's compartment must, in addition to having the load securely fastened or braced, be provided with header boards or similar devices of sufficient strength to prevent such shifting and penetration. All motor vehicles shall be so constructed or be equipped with adequate cargo fastening devices so that the load will not penetrate the cargo compartment wall when subjected to the maximum braking deceleration of which the vehicle is capable.

§ 193.86 *Rear end protection.* Every motor vehicle, except truck-tractors, pole trailers, and vehicles engaged in driveaway-towaway operations, the date of manufacture of which is subsequent to December 31, 1952, which is so constructed that the body of the chassis assembly if without a body has a clearance at the rear end of more than 30 inches from the ground when empty, shall be provided with bumpers or devices serving similar purposes which shall be so constructed and located that: (a) The clearance between the effective bottom of the bumpers or devices and the ground shall not exceed 30 inches with the vehicle empty; (b) the maximum distance between the closest points between bumpers, or devices, if more than one is used, shall not exceed 24 inches; (c) the maximum transverse distance from the widest part of the motor vehicle at the rear to the bumper or device shall not exceed 18 inches; (d) the bumpers or devices shall be located not more than 24 inches forward of the extreme rear of the vehicle; and (e) the bumpers or devices shall be substantially constructed and firmly attached. Motor vehicles constructed and maintained so that the body, chassis, or other parts of the vehicle afford the rear end protection contemplated shall be deemed to be in compliance with this section.

§ 193.87 *Flags on projecting loads.* Any motor vehicle having a load which extends beyond the sides or more than four feet beyond the rear shall have the extremities of the load marked with a red flag, not less than 12 inches square, at each point where a lamp is required by § 193.18.

§ 193.88 *Television receivers.* Any motor vehicle equipped with a television viewer, screen or other means of visually receiving a television broadcast shall have the viewer or screen located in the motor vehicle at a point to the rear of the back of the driver's seat if such viewer or screen is in the same compartment as the driver and the viewer or screen shall be so located as not to be visible to the driver while he is driving the motor vehicle. The operating controls for the television receiver shall be so located that the driver cannot operate them without leaving the driver's seat.

§ 193.89 *Buses, driveshaft protection.* Any driveshaft extending lengthways under the floor of the passenger compartment of a bus, except buses having a seating capacity of eight or less persons, shall be protected by means of at least one guard or bracket at that end of the shaft which is provided with a sliding connection (spline or other such device) to prevent the whipping of the shaft in the event of failure thereof or of any of its component parts. A shaft contained within a torque tube shall not require any such device.

§ 193.90 *Buses, standee line or bar.* Every bus, which is designed and constructed so as to allow standees, shall be plainly marked with a line or equipped with some other means so as to indicate to passengers that they are prohibited from occupying a space forward of a perpendicular plane drawn through the rear of the driver's seat and perpendicular to the longitudinal axis of the bus. Every such bus shall have clearly posted at or near the front, a sign stating that it is a violation of the Interstate Commerce Commission's regulations for a bus to be operated with passengers occupying the prohibited area. The requirements of this section shall not apply to any level of the bus other than the level in which the driver is located nor shall they be construed to prohibit seated passengers from occupying permanent seats located in the prohibited area provided such seats are so located that passengers sitting therein will not interfere with the driver's safe operation of the bus.

§ 193.91 *Buses, aisle seats prohibited.* No bus, except buses having a seating capacity of eight or less persons, shall be equipped with aisle seats unless such seats are so designed and installed as to automatically fold and leave a clear aisle when they are unoccupied. No bus shall be operated if any seat therein is not securely fastened to the vehicle.

§ 193.92 *Buses, marking emergency doors.* Any bus equipped with an emergency door shall have such door clearly marked in letters at least one inch in height with the words "Emergency Door" or "Emergency Exit." Emergency doors shall also be identified by a red electric lamp readily visible to passengers which lamp shall be lighted at all times when lamps are required to be lighted by § 192.30.

SUBPART H—EMERGENCY EQUIPMENT

§ 193.95 *Emergency equipment on all power units.* On every bus, truck, truck-tractor, and every driven vehicle in driveaway-towaway operation, there shall be:

(a) *Fire extinguisher.* At least one fire extinguisher with physical characteristics and fire extinguishing ability equivalent to or better than fire extinguishers which qualify under Classification B of the standards of Underwriters' Laboratories, Inc., 207 East Ohio Street, Chicago 11, Illinois, in effect on June 30, 1951. The extinguisher shall utilize an extinguishing agent which does not need protection from freezing and shall be properly filled and securely mounted in a bracket. The minimum size shall be one quart carbon tetrachloride type, two-pound carbon dioxide type, two-pound dry chemical type, or extinguishers of other types having extinguishing capacity equivalent to any of these types until December 31, 1952, and thereafter one and one-half quart carbon tetrachloride type, four-pound carbon dioxide type, four-pound dry chemical type, or extinguishers of other types having extinguishing capacity equivalent to any of these types. Two extinguishers may be carried to obtain the capacity required subsequent to December 31, 1952. This requirement shall not apply to any bus having a seating capacity of eight or less persons or any driveaway-towaway operation.

(b) *Spare bulbs.* At least one spare electric bulb for each kind of electric lamp used for any of the lighting devices required by these regulations. When sealed-beam head lamps are used, a spare sealed-beam head lamp shall be required. In driveaway-towaway opera-

tions, spares located on any one of the vehicles will be deemed adequate.

(c) *Spare fuses.* At least one spare fuse or other overload protective device, if the devices used are not of a reset type, for each kind and size used. In driveaway-towaway operations, spares located on any one of the vehicles will be deemed adequate.

(d) *Tire chains.* One set of tire chains for at least one driving wheel on each side, during the time when likely to encounter conditions requiring them, except that this requirement shall not apply to motor vehicles engaged in driveaway-towaway operations if such motor vehicles are not operated when such conditions exist.

(e) *Hand tools.* Hand tools adequate to effect replacement of lamps and fuses.

(f) *Warning devices for stopped vehicles.* One of the following combinations of warning devices:

(1) Three flares (liquid-burning pot torches) and three fusees and two red cloth flags; or

(2) Three red electric lanterns and two red cloth flags; or

(3) Three red emergency reflectors and two red cloth flags.

(4) Flares (pot torches), fusees, oil lanterns, or any signal produced by a flame, shall not be carried on motor vehicles used in the transportation of explosives, flammable liquids, or flammable compressed gases in cargo tanks, or in any motor vehicle using flammable compressed gases as a motor fuel; but in lieu of such flares and fusees, three electric lanterns or three red emergency reflectors shall be carried.

(5) The protective devices used shall comply with the requirements given in paragraphs (g), (h), (i), (j), and (k) of this section.

(g) *Requirements for flares.* Flares (pot torches) shall be adequate and reliable and shall comply with the requirements contained in the SAE Recommended Practice[1] "Liquid-Burning Emergency Flares."

(h) *Requirements for red electric lanterns.* Red electric lanterns shall be adequate, reliable, equipped with a battery or batteries within each unit, and shall comply with the requirements contained in the SAE Recommended Practice[1] "Electric Emergency Lanterns."

(i) *Requirements for red emergency reflectors.* Each red emergency reflector shall conform in all respects to the following requirements:

(1) *Reflecting elements required.* Each reflector shall be composed of at least two reflecting elements or surfaces on each side, front and back. The reflecting elements, front and back, shall be approximately parallel.

(2) *Reflecting elements to be Class A.* Each reflecting element or surface shall meet the requirement for a red Class A reflector contained in the SAE Recommended Practice[1] "Reflex Reflectors." The aggregate candlepower output of all the reflecting elements or surfaces in one direction shall not be less than 12 when tested in a perpendicular position with observation at one-third degree as specified in the Photometric Test contained in the above-mentioned Recommended Practice.

(3) *Reflecting surfaces, protection.* If the reflector or the reflecting elements are so designed or constructed that the reflecting surfaces would be adversely affected by dust, soot, or other foreign matter or contacts with other parts of the reflector or its container, then such reflecting surfaces shall be adequately sealed within the body of the reflector.

(4) *Reflecting surfaces to be perpendicular.* Every reflector shall be so constructed that, when the reflector is properly placed, every reflecting element or surface is in a plane perpendicular to the plane of the roadway surface. Reflectors which are collapsible shall be provided with means for locking the reflector elements or surfaces in the required position; such locking means shall be readily capable of adjustment without the use of tools or special equipment.

(5) *Reflectors, mechanical adequacy.* Every reflector shall be of such weight and dimensions as to remain stationary when subjected to a 40 mile per hour wind when properly placed on any clean, dry, paved road surface. The reflector shall be so constructed as to withstand reasonable shocks without breakage.

(6) *Reflectors, incorporation in holding device.* Each set of reflectors and the reflecting elements or surfaces incorporated therein shall be adequately protected by enclosure in a box, rack, or other adequate container specially designed and constructed so that the reflectors may be readily extracted for use.

(7) *Certification.* Every red emergency reflector designed and constructed to comply with these requirements shall be plainly marked with the certification of the manufacturer that it complies therewith.

(j) *Requirements for fusees.* Each fusee shall be adequate, reliable, capable of burning at least 15 minutes, and shall comply with the specifications of the Bureau of Explosives, 30 Vesey Street, New York 7, N. Y., dated December 15, 1944, and be so marked.

(k) *Requirements for red flags.* Red cloth flags shall be not less than 12 inches square, with standards adequate to maintain the flags in an upright position.

§ 193.96 *Buses, additional emergency equipment.* On every bus, except buses engaged in driveaway-towaway operations there shall be:

(a) All items required by § 193.95, and in addition,

(b) One hand axe, except for buses having a seating capacity of eight or less persons,

(c) One first-aid kit complying with the following requirements:

(1) *Size of kit.* The kit shall be of heavy duty 10-unit type or larger, or have contents at least equivalent in quality and number to the contents of such a kit.

(2) *Material for case and cover.* The case and the cover shall be substantially constructed of sheet steel, wood, fiber, or other durable material. If made of sheet steel, the case and cover shall be of metal at least number 24 U. S. Gage (nominal).

(3) *Tightness of case.* The case and cover shall be so constructed, including corners, covers, and closure means, that it shall be reasonably dust and weather proof when the cover is in the closed position, or the kit shall be mounted in a protected location within the passenger compartment of the motor vehicle so as to be reasonably dust and weather proof.

(4) *Opening and stop for cover.* If made of sheet steel or other metals, the case shall be so designed and constructed that the cover will be capable of being easily opened to an angle of 90° to 100° with the case and a substantial stop shall be provided at the angle of full opening; such stop shall not interfere with the smooth operation of the cover.

(5) *Method of hinging cover.* If made of metal, the cover shall be attached to the case by, at least, two substantial hinges or by a continuous piano-type hinge. If nonmetallic, the cover shall be attached by either a sliding or a hinged joint; if hinged, it shall be as prescribed for metallic construction.

(6) *Size of case.* The dimensions of the case shall be such as to permit the contents to be easily extracted and yet maintain the contents in a relatively fixed position.

(7) *Contents of kit.* The kit shall contain at least the contents specified, in not less than the quantities shown, in either of the two following types of kits:

A—UNIT TYPE KIT

4-inch bandage compress	1 package.
2-inch bandage compress	1 package.
1-inch adhesive compress	2 packages.
40-inch triangular bandage with two safety pins.	1 package.
Burn ointment	1 package.
Iodine applicator or applicator of other antiseptic solutions of, at least, equivalent bacteriological properties.	1 package.
Wire splint	1 package.
Tourniquet	1 package.

B—COMMERCIAL TYPE KIT

3-inch by 3-inch sterile gauze pads	Package of 12.
4-inch by 10 yards roller gauze bandage (must be replaced by unopened package after being opened).	1 package.
¾-inch adhesive compress	Package of 24.
1-inch by 2½ yards adhesive tape	1 roll.
40-inch triangular bandage with 2 safety pins.	1 package.
Burnt ointment	1-ounce tube.
Iodine applicator or applicator of other antiseptic solution of, at least, equivalent bacteriological properties.	1 package.
Wire splint	1 package.
Tourniquet	1 package.
Scissors	1.

Each kit shall be provided with instructions for the use of the contents. The contents of the kits, whether required by Parts 190–197 of this subchapter or in addition thereto, either in number or kind, shall conform either to the requirements contained in Federal Specification GG–K–391 (November 6, 1941) and Amendment No. 1 thereto (November 4, 1944), or the standards as found in the Thirteenth revision of the

[1] See footnote to § 193.25 (c).

Pharmacopoeia of the United States except that the 40-inch triangular bandage in the commercial type kit may be nonsterile and not compressed in the required manner if the package containing it clearly indicates that the contents are not sterile and except that no specification type scissor is required. Federal Specification GG–K–391 and amendments may be obtained from the Superintendent of Documents, Washington 25, D. C., at a cost of 5 cents per copy.

PART 194—REPORTING OF ACCIDENTS

Sec.

AUTHORITY: §§ 194.1 to 194.12 issued under 49 Stat. 546, as amended, sec. 835, 62 Stat. 739; 49 U. S. C. 304, 18 U. S. C., Sup., 835.

§ 194.1 *Accident reports confidential.* Accident reports made by motor carriers in compliance with the regulations in this part shall be for the information of the Commission, and shall not be open to public inspection.

§ 194.2 *Reportable accidents.* Every motor carrier, except private carriers, shall report to the Commission in the manner hereinafter prescribed, every accident in which a motor vehicle operated by him or it is involved, and from which there results an injury to or death of any person, or property damage to any and all vehicles, cargo, or other property involved, to an apparent extent of $100.00 or more.

§ 194.3 *Reports of accidents involving passenger-carrying vehicles.* A detailed report of each reportable accident involving a bus operated by him or it shall be prepared by the motor carrier on Form BMC–50–B (1949) (§ 7.50b of this chapter).

§ 194.4 *Reports of accidents involving property-carrying or service vehicles.* A detailed report of each reportable accident involving a motor vehicle other than a bus operated by him or it shall be prepared by the motor carrier on Form BMC–50–T (1949) (§ 7.50t of this chapter).

§ 194.5 *Filing of accident reports.* The original of each accident report prepared in compliance with these sections shall be filed by the motor carrier as soon as possible, and in every instance within 15 days after occurrence of the accident, with the District Director, Bureau of Motor Carriers, for the district in which the motor carrier has his or its principal place of business: *Provided,* That if the motor carrier has his or its principal place of business outside the borders of the United States, the original report of each such accident occurring in the United States shall be filed within 15 days after occurrence of the accident with the District Director as shown in § 190.40 of this subchapter.

§ 194.6 *Retention of copies of accident reports.* A copy of each accident report filed in compliance with the regulations in this part shall be retained by the motor carrier in the files of his or its principal place of business; *Provided, however,* That a copy of an identical report of such an accident filed with any State public utilities or railroad commission or other State agency or insurance company requiring the reporting of accidents on forms identical with Form BMC–50–B and Form BMC–50–T will satisfy this requirement if such copy carries a notation on its face that report of the accident has been made to this Commission.

§ 194.7 *Immediate notice of fatal accidents.* Whenever a reportable accident results in the death of any person at the time of the accident or within 24 hours thereafter, the motor carrier, whether domiciled in the United States or elsewhere, shall immediately transmit notice of such death by telegraph or telephone to the proper District Director as indicated in § 194.5. Such notice shall include the following information: The date, time, and exact location of the accident, the number of persons killed and the number injured, and the name and address of the motor carrier.

§ 194.8 *Deaths occurring before filing report.* In addition to the requirements of § 194.7, all deaths shall be reported on Form BMC–50–B or Form BMC–50–T whether they occur at the time of the accident or subsequently if such deaths occur prior to the filing of said accident report form.

§ 194.9 *Notice of death after filing report.* Whenever any accident results in the death of any person after the motor carrier has filed his report of the accident on Form BMC–50–B or Form BMC–50–T, notice of such death shall be given in writing, as soon as possible after such death becomes known to the motor carrier, to the proper District Director as indicated in § 194.5. Such notice shall include the following information: The date and location of the accident, the name and age of the deceased, and the name and address of the motor carrier.

§ 194.10 *Carrier to assist in investigation.* Every motor carrier shall make available to the duly authorized representative or representatives of the Commission all records and information which in any way pertain to any reportable accident, and shall afford all reasonable assistance in the investigation of any such accident.

§ 194.11 *Supplies of accident report Forms BMC–50–B and BMC–50–T.* For the purpose of compliance with the regulations in this part, every common and contract motor carrier shall keep on hand an adequate supply of Form BMC–50–B and/or Form BMC–50–T to enable prompt reporting of accidents.[1]

§ 194.12 *Instructions for preparing accident reports.* Reports of accidents on Form BMC–50–B and Form BMC–50–T shall be prepared in accordance with the following instructions:

General: Every applicable item must be filled in as fully and as accurately as information accessible to the motor carrier at the time of filing the report will permit.

Item 1: Enter name as it is on file with the Interstate Commerce Commission.

Item 2: Check "Yes" if you have been notified that your revenues place you in Class I. Otherwise Check "No."

Item 3: Enter the address of your principal place of business, as it is on file with the Interstate Commerce Commission.

Item 4: Always make two entries under this item: First, show whether the operation involved was common, contract, or "exempt" carriage (entering "exempt" if the operation was covered by the provisions of section 203 (b) of the Interstate Commerce Act, see § 190.32 of this sub-chapter). Second, enter your docket (MC) number if you have one. Otherwise enter "none."

Item 8: Enter all three names, State, county, and city or town in or near which accident occurred.

Item 9: Under this item give information fixing the accident location as nearly exactly as possible. This is especially important when highway design or condition, or some other local feature was involved in any way.

Item 15: Indicate the commodities which compose the vehicle's cargo, and not merely the class of such cargo. For example: enter "gasoline" or "No. 2 fuel oil" rather than "petroleum products."

Item 16 (b), on BMC–50–T only: If a second driver was on the vehicle, whether he is called a relief driver, a helper driver, or by some other designation, check "Yes."

Item 17, on BMC–50–T and 18 on BMC–50–B: If the vehicle, or any unit of a combination of vehicles, was itself the cargo being transported, by the driveaway-towaway method, check "Yes"; otherwise check "No."

Item 18 (a), on BMC–50–T only: Check "Yes" only if the vehicle was equipped with a berth meeting the specifications set forth in the Motor Carrier Safety Regulations.

Item 19 (b), on BMC–50–T only: If the power unit was owned by the driver whose name is reported under item 20, check "Yes." If it was owned by the person riding as relief driver at the time of the accident, write in the words "relief driver" and check "Yes."

Item 20: Enter the name and home address of the person at the wheel when the accident occurred, or who last drove the vehicle if it was stopped or parked without a driver at the time of the accident.

Items 21 through 30: These items are to be filled in whether the driver was operating a company-owned vehicle, a vehicle which he himself owned and leased to the carrier, or a vehicle owned by a third party and leased to the carrier.

Item 23: Accuracy in entering the Social Security number is very important. Error in entering any one of the nine digits which compose this number, or the omission of a digit, will render the number useless.

Items 28 and 29: If the driver has made use of the sleeper-berth provisions for breaking his off duty time into two periods totaling 8 hours, write in the words "sleeper berth" in addition to entering the hours on

[1] Supplies of these forms may be obtained from the Bureau of Motor Carriers, Interstate Commerce Commission, Washington 25, D. C., from any District Director or Supervisor, or the Superintendent of Documents, Washington 25, D. C.

duty and hours driving since last period of eight consecutive hours off duty.

Items 33 and 34: If another vehicle involved in the accident was operated by a motor carrier, regardless of ownership, the name and address of that motor carrier should be given.

Item 37: Enter the best available estimate of the amount of damage (in dollars) to each vehicle or unit of a combination of vehicles involved in the accident. Make this entry in every case, whether or not it is also reported that the vehicle or unit was a total loss.

If damage to a vehicle or unit is so extensive that it is not practical to repair it, check the appropriate space to indicate that it was a total loss.

If any vehicle or unit involved in the accident was not damaged, write "none" in the appropriate space.

Items 38, 39, and 40: For each person either killed or injured in the accident, enter name, address and age, if known, or approximate age, and check all applicable boxes. The number of checks necessary to give full information will vary for different persons. For example: John Smith may have been affected by carbon monoxide and also burned, the degree of his injuries being serious. If he were driver in vehicle No. 1, the total number of check marks required to report these facts would be five. On the other hand, Mary Brown may have been struck and killed instantly as she walked across the street. Two boxes only need be checked "killed outright" and "pedestrian."

If no one was killed or injured, enter the word "none" under item 38.

Item 42: Check each defect known to exist before the accident, brought to light by the accident itself, or discovered by investigation following the accident. Do not show breakage of sound parts which resulted from the accident. Include defects which caused the vehicle to be stopped, if accident occurred while it was so stopped.

Item 43: If opposing lanes of travel are separated by a parkway or other strip, check the word "Divided" in addition to showing the total number of lanes.

Item 46: Whenever the driver survives the accident and is able to make a statement, his own account of the accident is to be entered here. The account obtained from the driver for this purpose must be sufficiently complete and detailed to convey an understanding of his version of the accident. This account should be continued on an extra sheet of paper if more space is needed.

Item 47: An account of the accident containing the most reliable information to which the motor carrier has access at the time of reporting, sufficiently detailed and complete to convey an understanding of his version of the accident, shall be entered under this item, and shall be signed by a responsible official of the motor carrier. This account should be continued on an extra sheet of paper if more space is needed.

Diagram. In addition, a diagram showing pertinent highway information such as the approximate angle at which roads intersect; the width of pavement and of shoulders, etc., the course of travel of each vehicle involved, and the point at which collision occurred, should be prepared in those cases in which such a diagram would clarify the presentation of the facts.

PART 195—HOURS OF SERVICE OF DRIVERS

Sec.

AUTHORITY: §§ 195.1 to 195.12 issued under 49 Stat. 546, as amended; 49 U. S. C. 304.

§ 195.1 *Compliance with and knowledge of regulations.* Every motor carrier and its officers, agents, employees, and representatives shall comply with the following regulations, and every such motor carrier shall require that its officers, agents, employees, and representatives be conversant with Parts 190–197 of this subchapter.

§ 195.2 *Definitions*—(a) *On duty.* A driver is "on duty" from the time he begins to work or is required to be in readiness to work until the time he is relieved from work and all responsibility for performing work. Time spent by a driver resting in a sleeper berth or certain travel time under circumstances specified in § 195.7 shall not be included in computing time "on duty."

(b) *Driving time.* The terms "drive or operate" and "driving time" include all time spent on a moving vehicle and any interval not in excess of 10 minutes in which a driver is on duty but not on a moving vehicle. For the purpose of computing an interval in excess of 10 minutes, all stops made in any one village, town, or city, may be computed as one if the driver has not driven or operated the motor vehicle more than 10 miles in such village, town, or city. The terms "drive or operate" and "driving time" do not include time spent resting in a sleeper berth nor do they include certain travel time under circumstances specified in § 195.7.

(c) *Week.* The term "week" means any period of 168 consecutive hours beginning at the time the driver reports for duty as defined in paragraph (a) of this section.

(d) *24 consecutive hours.* The term "24 consecutive hours" means any such period starting at the time the driver reports for duty as defined in paragraph (a) of this section.

(e) *Sleeper berth.* The term "sleeper berth" means a berth conforming to the requirements of § 193.76 of this subchapter.

§ 195.3 *Maximum on-duty time.* No carrier subject to these regulations shall permit or require any driver employed or used by it to remain on duty, as defined in § 195.2 (a), for a total of more than 60 hours in any week, as defined in § 195.2 (c): *Provided, however,* That carriers operating vehicles on every day of the week may permit drivers to remain on duty for a total of not more than 70 hours in any period of 192 consecutive hours: *Provided further, however,* That this section shall not apply with respect to drivers of motor vehicles controlled and operated by any farmer and used in the transportation of his agricultural commodities and products thereof, or in the transportation of supplies to his farm; nor shall it apply with respect to driver-salesmen employed by private carriers of property who devote more than 50 percent of their time to selling and less than 50 percent to such work as driving, loading, unloading, and the like: *Provided further, however,* That this section shall not apply with respect to drivers of motor vehicles engaged solely in making deliveries for retail stores during the period from December 10 to December 25, both inclusive, of each year.

§ 195.4 *Maximum driving time.* Except under conditions set forth in § 195.10, no carrier subject to Parts 190–197 of this subchapter shall permit or require a driver employed or used by it to drive or operate for more than 10 hours in the aggregate in any period of 24 consecutive hours, unless such driver be off duty for 8 consecutive hours during or immediately following the 10 hours aggregate driving and within said period of 24 consecutive hours: *Provided, however,* That two periods of resting or sleeping in a berth, as defined in § 195.2 (e), may be cumulated to give the aforesaid total of 8 hours off duty: *Provided, however,* That no driver of a motor vehicle controlled and operated by any farmer and used in the transportation of his agricultural commodities and products thereof, or in the transportation of supplies to his farm, shall be permitted or required to drive such motor vehicle for more than an aggregate of 50 hours in any week, as defined in § 195.2 (c): *Provided further, however,* That no driver-salesman employed by a private carrier of property who devotes more than 50 percent of his time to selling and less than 50 percent to such work as driving, loading, unloading, and the like, shall be permitted or required to drive or operate a motor vehicle for more than an aggregate of 50 hours in any week as defined in § 195.2 (c).

§ 195.5 *Maximum hours of service of carrier-driver.* No carrier subject to Parts 190–197 of this subchapter if himself a driver shall remain on duty or drive for longer periods than those prescribed in §§ 195.3 and 195.4.

§ 195.6 *Sleeper berth, occupation.* No sleeper berth shall be occupied by more than one person at any time.

§ 195.7 *Travel time.* When a driver at the direction of the motor carrier is traveling, and is not driving or assuming any other responsibility, on a public passenger conveyance or a carrier-operated vehicle having individual rest facilities equivalent to those on a public passenger conveyance, such time shall be counted as driving and on-duty time unless the driver is afforded at least 8 consecutive hours off duty when arriving at destination, in which case he shall be considered as off duty for the entire period.

§ 195.8 *Driver's daily log.* (a) Every motor carrier shall require that a driver's daily log shall be made in duplicate by every driver employed or used by it and every driver who operates a motor vehicle shall make such a log. Form BMC-59 and the instructions for its use, which form and instructions are set forth below, shall be used for this purpose.

FORM – BMC 59 – Prescribed by the INTERSTATE COMMERCE COMMISSION Washington, D. C.

DRIVER'S DAILY LOG

(One calendar day – 24 hours)

Form approved, Budget Bureau No. 60–R53.2

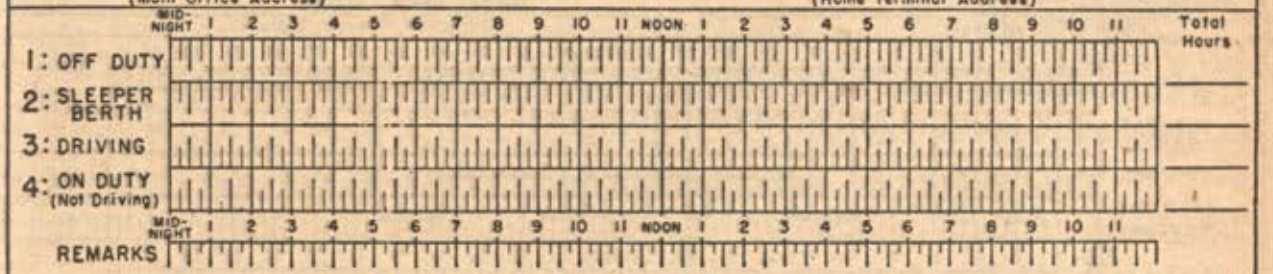
ORIGINAL – File each day at home terminal
DUPLICATE – Driver retains in his possession for one month

(Month) (Day) (Year) (Total mileage today) (Vehicle or State license number)

I certify these entries are true and correct:

(Name of Carrier) (Driver's signature in full)

(Main Office Address) (Home Terminal Address)



Check the time and enter name of place you reported and were released from work and when and where each change of duty occurred.

FROM: TO:

(Starting point or place) (Destination or turn around point or place)

USE TIME STANDARD AT HOME TERMINAL

Instructions for the Use of Driver's Daily Log (Form BMC 59)

1. Drivers and motor carriers will be held responsible for the proper maintenance of the daily logs. Drivers shall keep the log current to the time of the last change of duty status. Failure to make logs, failure to make required entries therein, falsification of entries, or failure to file logs with the motor carrier will make both the driver and the carrier liable to prosecution.

2. The driver shall forward each day the original log to his home terminal. If the services of a driver are used by more than one carrier during a calendar day, the driver shall furnish each motor carrier a copy of his log for the entire day. In such case the log shall indicate the name of each carrier served by the driver during that day.

3. The original logs shall be retained by the motor carrier for a period of one year. Duplicate copies of the logs are the driver's personal records and are to be kept for a period of one month in the possession of the driver while he is on duty.

4. The time standard in effect at the driver's home terminal shall be used. The log shall be prepared, maintained, and submitted, for a 24-hour calendar day beginning at midnight.

5. All entries shall be made by the driver except that the name and main office address of the motor carrier may be printed or otherwise entered by an authorized representative of the carrier. The name of the motor carrier shall be that for which the driving is performed. In case of the driver of a leased vehicle, the name shown shall be that of the motor carrier performing the transportation.

6. The driver shall certify to the correctness of the log by signing his name in full.

7. In addition to the identification of the carrier and the driver's signature, the entries shall indicate:

(a) The month, day, and year for which the log is prepared.

(b) The total mileage traveled during the calendar day covered by the log.

(c) The carrier's vehicle number or, if no such number is provided, the state license number of the power unit.

(d) Driver's home terminal address.

(e) The actual period or periods during the calendar day spent in the activities specified on Lines 1, 2, 3, and 4 by drawing a continuous line between the appropriate time markers. The following directions are illustrative only and are not to be construed as modifying the definitions or regulations in §§ 195.1 to 195.12, inclusive:

Line 1, off duty. All time, except that spent in a sleeper berth, when the driver is not working, is not required to be in readiness to work, or is not under any responsibility for performing work.

Line 2, sleeper berth. All time resting in a sleeper berth.

Line 3, driving. All time spent driving or riding on a moving vehicle, including all stops not in excess of 10 minutes, except that time spent in a sleeper berth or time spent traveling under the conditions named in § 195.7.

Line 4, on duty (not driving). All time spent by a driver in performing work other than driving, such as loading or unloading, preparing reports, remaining in readiness to perform work, remaining in charge of disabled vehicles, stops for meals unless the driver has been relieved from duty, etc.

(f) Under "Remarks" the time and the name of the place where each such change of duty occurred, such as the place of reporting for work, starting to drive, stops exceeding 10 minutes in duration, and where released from work. Explain any emergency resulting in hours exceeding those permitted by the regulations.

(g) In the column "total hours", the hours and fractions thereof shown in each of Lines 1, 2, 3, and 4. The sum of the entries in this column must total 24 hours. Enter the place where the trip began and the final destination or farthest turn-around points. On trips requiring more than one calendar day, the log for each day shall show the origin and final destination at the bottom of the log with the points of beginning and ending the travel of that day shown as required by (f) in "Remarks." If a driver departs from and returns to the same place on any day, the "destination or turn-around point" shall be the farthest point reached before the driver begins his return trip.

Note: The Interstate Commerce Commission will not provide supplies of the log. The log may be incorporated as a part of any daily form used by a carrier provided it is so ruled that the log appears distinct and separate from other portions of such form. In reproducing the log, dimensions of approximately 5¼ x 7½ inches shall be used. The full instructions for the use of the log must be reproduced either on the reverse side of each log sheet or, if logs are bound in book form on either side of the book cover. Stocks of logs in the possession of carriers or their suppliers on the effective date of these regulations may be used.

(Specimen executed log.)

FORM – BMC 59 – Prescribed by the INTERSTATE COMMERCE COMMISSION Washington, D. C.

DRIVER'S DAILY LOG

(One calendar day – 24 hours)

Form approved, Budget Bureau No. 60–R253.2

ORIGINAL – File each day at home terminal
DUPLICATE – Driver retains in his possession for one month

May 1 1952 (Month) (Day) (Year)

161 (Total mileage today)

Tractor #123 (Vehicle or State license number)

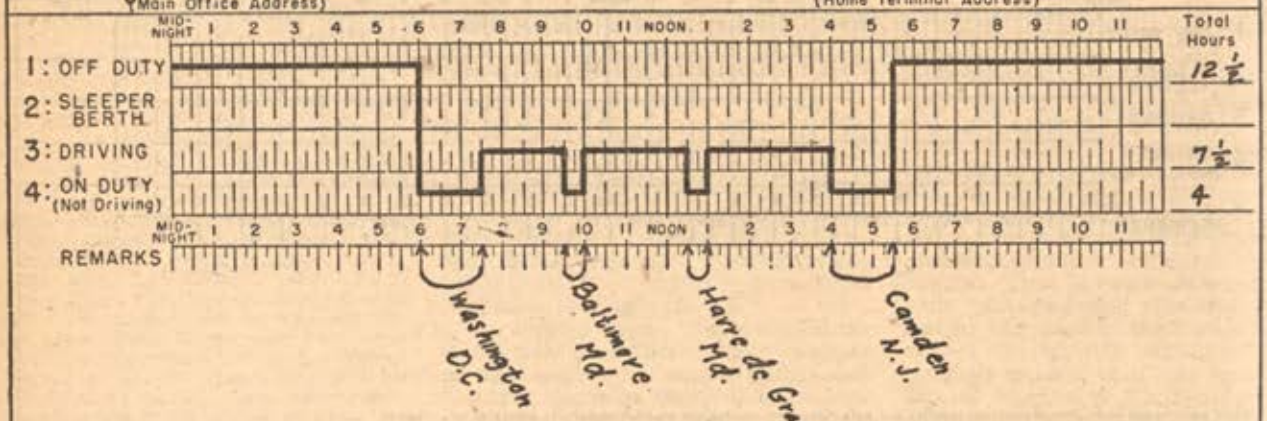
I certify these entries are true and correct:

X. Y. Z. Transportation Co. (Name of Carrier)

John E. Doe (Driver's signature in full)

Washington, D. C. (Main Office Address)

Baltimore, Md. (Home Terminal Address)



Check the time and enter name of place you reported and were released from work and when and where each change of duty occurred.

FROM: Washington, D.C. (Starting point or place)

TO: Boston, Mass. (Destination or turn around point or place)

USE TIME STANDARD AT HOME TERMINAL

This specimen executed log shows how a driver's log is made out. The driver in this instance reported for duty at Washington, D. C., at 6:00 AM, waited 30 minutes for work, spent 1 hour loading his vehicle, and then drove the vehicle for 2 hours, reaching Baltimore, Md., at 9:30 AM. He stopped at Baltimore for 30 minutes for gas and coffee and left Baltimore at 10:00 AM, driving for 2¼ hours, reaching Havre de Grace, Md., where he stopped 30 minutes for lunch. He left there at 1:00 PM and drove 3 hours, reaching Camden, N. J., at 4:00 PM. There he spent 1½ hours unloading the vehicle after which he went off duty for the rest of the calendar day.

Although he made a stop of 5 minutes at Laurel, Md., to make a delivery, this stop is not shown but is included in the driving time on Line 3 as the stop was less than 10 minutes in duration.

The two stops of 30 minutes each at Baltimore and Havre de Grace are shown on Line 4—"On Duty" at these stops were more than 10 minutes in duration.

The total hours for each line show 12½ hours off duty; 7½ hours driving and 4 hours on duty (not driving) for the day covered by the log. The sum of these hours shown under the "Total Hours" equals 24 hours.

Under "Remarks" the checks on time markers and the entries show that the driver reported for work at Washington, D. C., at 6:00 AM and was on duty (not driving) until he started to drive at 7:30 AM. The time spent driving, including the 5-minute stop, is shown on Line 3. All stops for gas, coffee, and lunch, which exceeded 10 minutes each, are shown on Line 4. The time spent unloading at Camden from 4:00 PM until 5:30 PM is also shown on Line 4. At 5:30 PM he went off duty for the balance of the calendar day and the time from 5:30 PM to midnight is shown on Line 1 as was the time from the previous midnight to 6:00 AM when he went on duty at Washington.

As the destination of the driver on this trip was Boston, Mass., he should enter the original starting point and the final destination on the appropriate line near the bottom of the form, thus "From: Washington, D. C., To: Boston, Mass." The time marker and the entry indicate he traveled only as far as Camden where he was relieved of duty for that day. His log for the next day will show that he went on duty and started driving for that day at Camden. The original starting point and final destination are to be shown on the log for each day throughout the trip.

(b) The requirements of this section shall not apply (1) to any driver who drives wholly within a radius of 50 miles from the garage or terminal at which he reports for work; provided, however, that the motor carrier employing or using such driver maintains and retains for a period of one year records showing the total number of hours the driver is on duty per day and the time at which the driver reports for and is released from duty each day; and provided further that no such driver remains on duty for more than twelve hours in any period of 24 consecutive hours; (2) to drivers of farm trucks; or (3) to drivers of motor vehicles of private carriers of property commonly called work trucks, or work cars which are especially designed or equipped for use and are used solely in the construction or maintenance of their plants and equipment.

§ 195.9 *Monthly reports.* (a) Every motor carrier, other than a private carrier of property, shall file on Form BMC–61 (§ 7.61 of this chapter) a monthly report of every instance during the calendar month covered thereby in which a driver employed or used by it has been required or permitted to be on duty, or to drive or operate a motor vehicle in excess of the hours prescribed by §§ 195.3 and 195.4 and shall indicate therein the reasons for such excess hours.

(b) Form BMC–60 (§ 7.60 of this chapter) shall be used in certifying to the correctness of information in attached reports on Form BMC–61 in transmitting such reports for filing.

(c) Every Class I motor carrier, as defined by the Commission in prescribing the Uniform System of Accounts (§§ 181.01–1 and 182.01–1 of this subchapter), shall file on Form BMC–62 (§ 7.62 of this chapter) a report for every calendar month in which no driver employed **or** used by it has been required or permitted to be on duty, or to drive or operate a motor vehicle in excess of the hours prescribed by §§ 195.3 and 195.4.

(d) Forms BMC–60, BMC–61, and BMC–62 shall be prepared in triplicate, shall be signed by the motor carrier or his or its agent, and the original and one copy thereof shall be filed by mailing or otherwise with the District Director, Bureau of Motor Carriers, Interstate Commerce Commission, for the district in which his or its principal place of business is located not later than the fifteenth day of the month next following the calendar month for which such re-

port is made. One copy of each such report shall be retained in the files of the motor carriers for a period of three years.

(e) Motor carriers having their principal places of business outside the borders of the United States shall file the reports referred to in the preceding paragraphs (Forms BMC–60, 61, and 62) with the District Director of the Bureau of Motor Carriers as shown in § 190.40 of this subchapter, not later than the fifteenth day of the month next following the calendar month for which such report is made. One copy of each such report shall be retained in the files of the motor carrier for a period of three years.

§ 195.10 *Adverse driving conditions.* In case of snow, sleet, fog, or other adverse weather conditions, or in case the highways are covered with snow or ice, or presence of unusual adverse road and traffic conditions, a driver may be permitted and required to drive or operate a motor vehicle for not more than 12 hours in the aggregate in any period of 24 consecutive hours in order to complete his run, without being off duty for a period of 8 consecutive hours as provided by § 195.4.

§ 195.11 *Emergency conditions.* In case of any emergency, a driver may complete his run without being in violation of the provisions of these regulations, if such run could reasonably have been completed without such violation.

§ 195.12 *Relief from regulations.* These regulations shall not apply to any carrier subject thereto when transporting passengers or property to or from any section of the country with the object of providing relief in case of earthquake, flood, fire, famine, drought, epidemic, pestilence, or other calamitous visitation or disaster.

PART 196—INSPECTION AND MAINTENANCE

Sec.
196.1 Compliance.
196.2 Inspection and maintenance.
196.3 Lubrication.
196.4 Unsafe operations forbidden.
196.5 Motor vehicles declared "out of service".
196.6 Damaged vehicles, inspection.
196.7 Vehicle condition report by driver.
196.8 Driveaway-towaway operations, inspections.
196.9 Recommended practices and forms.

AUTHORITY: §§ 196.1 to 196.9 issued under 49 Stat. 546, as amended; 49 U. S. C. 304.

§ 196.1 *Compliance.* Every motor carrier, its officers, drivers, agents, representatives, and employees directly concerned with the inspection or maintenance of motor vehicles, shall comply and be conversant with the requirements of this part.

§ 196.2 *Inspection and maintenance.* Every motor carrier shall systematically inspect and maintain, or cause to be systematically maintained, all motor vehicles subject to its control, and the accessories required by Part 193 of this subchapter, to be mounted thereon, to insure that such motor vehicles and accessories are in safe and proper operating condition. Such inspections, for buses, shall include a test at least once every 90 days of all push-out windows and emergency doors to determine that they are operating properly and that the windows comply with the requirements of Subpart D of Part 193 of these regulations. A systematic inspection and maintenance record shall be maintained for each motor vehicle controlled by a motor carrier for the period during which such vehicle is subject to the motor carrier's control. Such records shall include, at least: (a) An identification of the vehicle including make, model, serial number, and number of tires, their size, and number of plies; (b) a record of inspection and repairs indicating their date and nature; (c) a lubrication record; (d) a systematic means for indicating for each vehicle the nature and due date of the various inspection and maintenance operations to be performed; (e) if leased, or otherwise contracted for, such records shall also include an identification of the lessor or contractor furnishing the motor vehicle. (Recommend procedure and forms set forth in § 196.9.)

§ 196.3 *Lubrication.* Every motor carrier shall institute such procedures as may be necessary to insure that motor vehicles are properly lubricated; that proper action is taken to correct oil and grease leaks; that undue accumulations of grease and oil are investigated, removed, and the cause thereof corrected.

§ 196.4 *Unsafe operations forbidden.* No motor carrier shall permit or require a driver to drive any motor vehicle revealed by inspection or operation to be in such condition that its operation would be hazardous or likely to result in a breakdown of the vehicle nor shall any driver drive any motor vehicle which by reason of its mechanical condition is so imminently hazardous to operate as to be likely to cause an accident or a breakdown of the vehicle. If while any motor vehicle is being operated on a highway, it is discovered to be in such unsafe condition, it shall be continued in operation only to the nearest place where repairs can safely be effected, and even such operations shall be conducted only if it be less hazardous to the public than permitting the vehicle to remain on the highway.

§ 196.5 *Motor vehicles declared "out of service."* No motor carrier shall permit or require a driver to drive nor shall any driver drive any motor vehicle which by reason of its mechanical condition is so imminently hazardous to operate as to be likely to cause an accident or a breakdown and which motor vehicle, because of such condition, has been declared and marked "out of service" with the prescribed sticker by a specifically authorized employee of this Commission. Such motor vehicle shall not be operated until the repairs required by the "out of service notice" on Form BMC 63 have been satisfactorily completed and the "out of service" sticker removed. No person shall remove the "out of service" sticker from such motor vehicle prior to the completion of the required repairs. When the repairs have been made, the carrier shall so certify to the Commission on Form BMC 63, in accordance with the terms prescribed thereon.

OUT OF SERVICE VEHICLE

No. _____

This motor vehicle has been declared

UNSERVICEABLE

by the

BUREAU OF MOTOR CARRIERS
INTERSTATE COMMERCE COMMISSION

This vehicle is not to be operated until repaired

This sticker shall be removed only under the conditions stated on the "Out of Service Notice". Unauthorized removal shall make the person responsible liable to fine under section 222 of the Interstate Commerce Act.

Signature _____

Form BMC 63

INTERSTATE COMMERCE COMMISSION

BUREAU OF MOTOR CARRIERS

OUT OF SERVICE NOTICE

VEHICLE IDENTIFICATION

	Power unit	Trailer
Company No.	-------	------
State tag No.	-------	------
Mileage reading	-------	XXXXXX
Type vehicle	-------	------

To _____
_____
_____

Place of inspection _____
Time of inspection _____
Date of inspection _____

An "Out of Service Sticker" No. _____ has been placed on this vehicle and the motor vehicle has been declared unserviceable by the undersigned for the following reasons:

_____
_____
_____
_____

It is not to be operated until the necessary repairs have been satisfactorily completed. When repairs have been satisfactorily completed and this vehicle is restored to safe operating condition, the reverse side of this form "Report of Completion of Repairs on Out of Service Vehicle" shall be filled out by a qualified company official and mailed to the place designated.

(Signed) _____
(Title) _____
(Address) _____

Acknowledgment of company representative

I acknowledge that an "Out of Service" sticker has been placed on the vehicle designated above at the time and place indicated.

(Name) _____
(Title) _____
(Address) _____

INTERSTATE COMMERCE COMMISSION

BUREAU OF MOTOR CARRIERS

(Reverse side of Form BMC 63)

REPORT OF COMPLETION OF REPAIRS ON OUT OF SERVICE VEHICLE

To _____
_____
_____

DRIVER'S REPORT OF COMPLETION OF REPAIRS

(To be filled out by driver only if repairs are not made at carrier's garage)

(Date)

In compliance with your "Out of Service Notice" on the reverse side, this motor vehicle has been repaired in the following manner: ---

---

---

by (name) ---

(address) ---

To the best of my knowledge and belief this motor vehicle is now in safe operating condition and for that reason the "Out of Service" sticker has been removed by me.

(Signed) ---

MOTOR CARRIER'S REPORT OF COMPLETION OF REPAIRS

(Date)

In compliance with your "Cut of Service Notice", I have personally examined this motor vehicle and certify that it has been repaired, as shown below, and is now in safe operating condition.

Statement of repairs completed ---

The "Out of Service" sticker:
(was removed by the driver as stated above)
(has been removed by the undersigned)
and the vehicle restored to service on
--- at ---
(Date) (Location)

(Signed) ---

(Title) ---

§ 196.6 *Damaged vehicles, inspection.* No motor carrier shall permit or require a driver to drive nor shall any driver drive a motor vehicle which has been damaged in an accident or by other cause until inspection has been made by a person qualified to ascertain the nature and extent of the damage and the relationship of such damage to the safe operation of the motor vehicle, nor shall such motor vehicle be operated until such person has determined it to be in safe operating condition.

§ 196.7 *Vehicle condition report by driver.* Except as provided for driveaway-towaway operations in § 196.8, every motor carrier operating more than one motor vehicle shall require its drivers to report and every driver shall prepare such a report in writing at the completion of his day's work or tour of duty, which report shall either list any defect or defficiency of the motor vehicle discovered by said driver or reported to him as would be likely to affect the safety of operation of the motor vehicle or result in its mechanical breakdown or shall indicate that no such defects or deficiencies were discovered by or reported to him. Such reports shall be carefully examined, the defects reported thereon shall be checked and the report shall be retained by the motor carrier for a period of at least 3 months.

§ 196.8 *Driveaway-towaway operations, inspections.* Every motor carrier, with respect to motor vehicles engaged in driveaway-towaway operations, shall comply with this section in addition to § 196.1 to 196.7, inclusive, except that the driver's "Vehicle Condition Report" required by § 196.7 and the maintenance records required by § 196.2 shall not be required for any vehicle which is part of the shipment being delivered. Before the beginning of any driveaway-towaway operation of motor vehicles in combination, the motor carrier shall make a careful inspection and test to ascertain that the tow-bar or saddle-mount connections are properly secured to the towed and towing vehicles, that they function adequately without cramping or binding of any of the parts, and that the towed motor vehicle follows substantially in the path of the towing vehicle without whipping or swerving. Every motor carrier shall maintain practices to insure that following completion of any trip in a driveaway-towaway operation of motor vehicles in combination, and before they are used again, the tow-bars and saddle-mounts are disassembled and inspected for worn, bent, cracked, broken, or missing parts. Before reuse, suitable repair or replacement shall be made of any defective parts and the devices shall be properly reassembled.

§ 196.9 *Recommended practices and forms.* The following practices and forms are recommended to motor carriers for consideration as one means of establishing the inspection and maintenance practices which are required by § 196.2 to § 196.8.

(a) *Report of vehicle condition.* As a convenient means of providing for the report required by § 196.7, the following "Driver's Vehicle Condition Report" is suggested. The items are arranged in a logical order of inspection. While the regulations do not require a written report of the inspection prior to driving, the form may be adapted for such a report by duplicating the text of the following form and using an appropriate heading. Changes may be made to suit the particular carrier's operations, such as by providing for the recording of more than one inspection on a single form.

DRIVER'S VEHICLE CONDITION REPORT

Name of motor carrier ---

Company vehicle No. ---

(Date)

REPORT AFTER TRIP

	Driver's report [1]	Mechanic's report [1]
Mileage reading on speedometer (insert)		
Before starting engine:		
Oil, if added, insert number of quarts		
Water		
Gasoline, if added, insert number of gallons		
Brake lines to trailers		
Electric lines to trailers		
Drive line		
Coupling devices		
Tires and wheels		
Springs		
Body and load		
Glass		
Emergency equipment:		
Torches, lanterns, or reflectors		
Fusees		
Flags		
Spare bulbs		
Fuses		
First-aid kit (buses)		
Axe (buses)		
After starting engine (out of cab):		
Fuel system		
Cooling system		
Engine		
Leaks		
Lights:		
Head		
Tail		
Stop		
Clearance and marker		
Reflectors		
After starting engine (in cab):		
Oil pressure		
Ammeter		
Horn		
Windshield wipers		
Parking brakes		
Clutch		
Transmission		
Rear vision mirrors		
Steering		
Service brakes		
Speedometer		
Other items requiring attention		

[1] Drivers should (√) items which are satisfactory and (X) items which are not, and explain defects next to the X or if there is insufficient room, at bottom of the form. Items which are marked (X) by the driver must show a (√) with mechanic's initials indicating correction before continuance of operation and a short explanation of the repairs completed either next to the √ or if there is insufficient room, at bottom of form.

REPORT AFTER TRIP—continued

	Driver's report [1]	Mechanic's report [1]
Before starting engine—Con.		
Gasoline, if added, insert number of gallons		
Brake lines to trailers		
Electric lines to trailers		
Drive line		
Coupling devices		
Tires and wheels		
Springs		
Body and load		
Glass		
Emergency equipment:		
Torches, lanterns, or reflectors		
Fusees		
Flags		
Spare bulbs		
Fuses		
First-aid kit (buses)		
Axe (buses)		
After starting engine (out of cab):		
Fuel system		
Cooling system		
Engine		
Leaks		
Lights:		
Head		
Tail		
Stop		
Clearance and marker		
Reflectors		
After starting engine (in cab):		
Oil pressure		
Ammeter		
Horn		
Windshield wipers		
Parking brakes		
Clutch		
Transmission		
Rear vision mirrors		
Steering		
Service brakes		
Speedometer		
Other items requiring attention		

(Driver's name) ---

(b) *Inspection and maintenance record forms.* (1) Section 196.2 requires that motor carriers maintain systematic inspection and maintenance records but the regulations do not require any particular type or form of records. As a convenient means for providing the systematic inspection and maintenance records required by § 196.2, the following forms are suggested. Other systems recommended by the vehicle manufacturers are suggested as alternative methods.

(2) It is recommended that a cardboard check sheet for each inspection period for each vehicle be placed at a convenient point in the garage. Under the suggested system, when the four 1,000-mile inspections have been completed, the mechanic will know that he should perform the 5,000-mile inspection in accordance with the 5,000-mile inspection card. These forms, especially the mileage intervals, are suitable for the average over-the-road operator but changes may be made to adapt them to the individual operation. The items listed may be too numerous for some operations and in such cases, carriers may select items applicable to their own operations. Carriers may alter the recommended mileage figures to suit their needs or inspection periods may be determined on other than a mileage basis such as time or fuel consumption. The fundamental requirement is that there be a systematic inspection and maintenance system.

(Name of carrier)

[1,000-mile inspection, vehicle No. ..... After inspection No. 4 perform 5,000-mile check which shall include the fifth 1,000-mile check]

Type of inspection [1]		Inspection No. 1	2	3	4
	Speedometer reading				
	Date of inspection				
	Group 1—Axle, front:				
L	Axle and wheel alignment				
AOL	Tie rod assembly, etc				
	Group 2—Axle, rear:				
OL	Differential housing				
L	Radius rods, etc				
	Group 3—Body and cab				
	Group 4—Brakes				
	Group 5—Clutch				
	Group 6—Cooling system				
	Group 7—Electrical system				
	Group 8—Engine				
	Group 9—Frame and springs				
	Group 10—Fuel and exhaust system				
	Group 11—Steering				
	Group 12—Transmission				
	Group 13—Propeller shaft				
	Group 14—Wheels, rims, and tires				
	Group 15—Special equipment				

[1] A=Adjustment; H=heavy inspection; L=visual check-up; O=oil or grease; R=replace or rebuild; T=test

(Name of carrier)

[5,000-mile inspection, vehicle No. ..... After inspection No. 9, perform 50,000-mile inspection which shall include the tenth 5,000-mile inspection]

Type of inspection		Inspection No. 1	2	3	4	5	6	7	8	9
	Speedometer reading									
	Date of inspection									
	Group 1 axle, front:									
H	Axle, center									
TA	Axle and wheel alignment									
H	Brake spider, etc									

NOTE: Have similar forms for the 50,000-mile inspection and the 100,000-mile inspection with type of inspection in accordance with the inspection procedure.

And it is further ordered, That the proceedings in Ex Parte Nos. MC-2, MC-3, and MC-4 be, and they are hereby, discontinued, and the safety rules and regulations heretofore in effect in Parts 190 to 196, inclusive (formerly parts 1 to 6, inclusive), and the orders under which they were issued, be, and they are hereby, superseded on the effective date hereof.

Notice hereof shall be given to motor carriers and the general public by depositing a copy in the office of the Secretary of the Commission in Washington, D. C., and by filing a copy with the Director, Division of the Federal Register.

By the Commission.

[SEAL] W. P. BARTEL,
Secretary.

[F. R. Doc. 52-5382; Filed, May 14, 1952; 8:45 a. m.]

TITLE 21—FOOD AND DRUGS

Chapter I—Food and Drug Administration, Federal Security Agency

PART 17—BAKERY PRODUCTS; DEFINITIONS AND STANDARDS OF IDENTITY

BREAD AND ROLLS

In the matter of definitions and standards of identity for the following foods: Bread, white bread, and rolls, white rolls, or buns, white buns; enriched bread and enriched rolls or enriched buns; milk bread, and milk rolls or milk buns; raisin bread and raisin rolls or raisin buns; whole wheat bread, graham bread, entire wheat bread, and whole wheat rolls, graham rolls, entire wheat rolls, or whole wheat buns, graham buns, and entire wheat buns.

By virtue of the authority vested in the Federal Security Administrator by the provisions of the Federal Food, Drug, and Cosmetic Act (sections 401, 701, 52 Stat. 1046, 1055; 21 U. S. C. 341, 371), and upon the basis of the whole record and the reliable, probative and substantial evidence received at the hearings held pursuant to notices published in the FEDERAL REGISTER on June 7, 1941 (6 F. R. 2771), March 19, 1943 (8 F. R. 3378), and October 14, 1948 (13 F. R. 6024), and upon consideration of the exceptions filed to the proposed order issued by the Federal Security Administrator on August 8, 1950 (15 F. R. 5102), which exceptions are allowed in part and rejected in part, as appears from notations on the exceptions which are on file with the Hearing Clerk, Federal Security Agency, room 5440, Federal Security Building, Fourth Street and Independence Avenue SW., Washington, D. C., and as is apparent from the detailed findings made below, the following order is promulgated:

Findings of fact.[1] 1. The food commonly and usually known as bread or white bread and that commonly and usually known as rolls, while rolls, buns, or white buns is prepared by baking a kneaded yeast-leavened dough made by moistening flour with water (or with certain other liquid ingredients hereinafter specified, alone or in combination with water) with the addition of salt, and usually with the addition of certain other ingredients as hereinafter set forth. Bread and rolls are sometimes prepared from bromated flour or phosphated flour or both, with or without admixture with plain flour. (R. 30, 49, 57, 59-62, 69, 70, 71; Ex. A)

2. Rolls, sometimes known as buns, differ from bread in the size of the units baked, and usually in their shape. A reasonable and satisfactory differentiation is that a loaf of bread weighs, after cooling, one-half pound or more, whereas a roll, after cooling, weighs less than one-half pound. (R. 60-62, 69; Ex. A)

3. White bread and, to a lesser extent, other types of bread are sometimes prepared for special dietary use without added salt. They are commonly called salt-free bread. The omission of salt does not render bread salt free, due to the presence of salt in some of the ingredients normally used in preparing bread, and these special breads may also differ in composition from ordinary bread in other ways not adequately described in the record. Additional evidence is necessary before standards for salt-free breads can be formulated. (R. 71, 14296-14297)

4. All bread and rolls contain moisture. An excessive moisture content tends to deceive consumers. A reasonable maximum limitation upon the moisture, which is somewhat in excess of the usual content, is 38 percent by weight, the solids being not less than 62 percent by weight. A satisfactory and reliable method for determining the total solids contained in bread and rolls is the method prescribed in "Official Methods of Analysis of the Association of Official Agricultural Chemists," Seventh Edition, 1950, page 209, section 13.70, "Total Solids in an Entire Loaf of Bread," except that if the baked unit weighs 1 pound or more, one entire unit is used for the determination, and if the baked unit weighs less than 1 pound such number of entire units as weigh 1 pound or more are used for the determination. (R. 64, 68, 85-87, 138-142; Ex. A, 2)

5. Shortening is commonly, but not always, added to bread dough. Any food fat or food oil, including butter, oleomargarine, and cream, or any mixture of two or more of these, is suitable for this purpose. For enhancing the shortening action of fats and oils, lecithin derived from corn oil or soybean oil (which with their associated phosphatides are both commercially known as lecithin) and mono- and diglycerides of fat-forming fatty acids are sometimes used and, except in the case of mono- and diglycerides of lauric acid, are functionally suitable for such use. The evidence shows that the properties of lauric acid are somewhat different from those of other fatty acids, and further evidence is needed to establish its suitability for use as a constituent of a mono- or diglyceride. While on this record the other mono- and diglycerides of fat-forming fatty acids are harmless, they are surface-active agents which affect the surface tension of substances which they contact, and the significance of such surface action is not adequately shown on the record to permit a final decision as to their safety for use in bread.[2]

Lecithin was proposed as an ingredient of the dough apart from its use as an ingredient of shortening. There was no substantial evidence, however, that it serves any useful purpose other than in conjunction with shortening. In 1942, mono- and diglycerides in limited amounts, ranging from 4 percent to possibly as high as 15 percent (usually not

[1] The citations following each finding of fact that refer to the pages of the transcript of the testimony and the exhibits received in evidence at the hearing.

[2] See Statement on the Use of Surface Active Agents in Food, Food Protection Committee, National Research Council.

exceeding 5 percent), were used as ingredients of many types of shortening. Since 1942, experience has shown that even larger proportions of mono- and diglycerides in the shortening will further enhance the shortening from a functional standpoint.

Shortening in bread, among other things, makes it more tender, softer, more appetizing to many, slows the rate of hardening, and increases the nutritive value. The effect of shortening on tenderness, softness, and rate of hardening of bread is more pronounced when mono- and diglycerides of fat-forming fatty acids are used in combination with the shortening. The record indicates that the use of mono- and diglycerides in amounts in excess of those necessary to contribute desirable shortening properties may so soften the bread that deception of consumers as to the age of the bread may result, such as sometimes occurs when polyoxyethylene monostearate is used (see finding 39). The monoglycerides are much more active than diglycerides in producing abnormal softness. In order to prevent abuses, which would be possible if large amounts of mono- and diglycerides were used with shortening or if monoglycerides were so used without diglycerides, it is reasonable and desirable to set a limit on the amount of these substances that may be used with or as an ingredient of the shortening. In commercial production the proportions of monoglycerides and diglycerides vary. Products consisting almost entirely of monoglyceride can be produced. Such products are known as purified or concentrated monoglycerides. The commercial mixture of mono- and diglycerides discussed most frequently at the hearing contained 40 percent monoglyceride, 55 percent diglyceride, and 5 percent triglyceride. There was testimony that in rich-formula breads (that is, those containing relatively high proportions of shortening, sugar, and nonfat dry milk solids) the bread will be improved where 10 percent to 12 percent of the shortening is mono- and diglycerides. In lean-formula breads a higher percentage would be used, and the maximum amount recommended was 25 percent. The formulas of most commercially produced breads are such that the use of 25 percent mono- and diglycerides in the shortening would produce a softening effect that might be deceptive to consumers. The evidence indicates that the softness of bread resulting from the use of shortening containing not more than 20 percent mono- and diglycerides (of which 40 percent is monoglyceride) is not likely to deceive consumers as to the age of the bread. Where mono- and diglycerides are used in or with the shortening, it is reasonable to limit the monoglyceride content to 8 percent by weight of the total. Where monoglyceride alone is so used the permitted amount should be somewhat above 8 percent to allow for the action of the diglyceride that has been omitted. Although a precise figure is not shown by the record, it is reasonable, in view of the relative softening effect of monoglycerides and diglycerides, to limit the monoglyceride when used alone to not more than 10 percent by weight of the combined shortening and monoglyceride. (R. 71–73, 194, 198, 209–213, 228–229, 231, 243–244, 256–257, 269–270, 295, 307, 327, 464–466, 496–497, 4190–4191, 5155–5156, 5159–5160, 5216–5217, 5225–5226, 5232–5233, 5248–5250, 5254, 5271, 5296, 5305–5307, 5332, 5341, 5352, 5395, 5407–5408, 5432, 5458, 5467, 5495–5499, 5505, 5513–5515, 5805, 5815–5816, 5856–5858, 5883, 5910, 11781–11782, 11801–11802, 14045–14051, 16777–16783; Ex. 2, 3, 4, 42, 44, 211, 213, 370–371)

6. Compounds have been prepared by reacting diacetyl tartaric acid anhydride and mono- and diglycerides of fat forming fatty acids. The resultant products are a mixture of mono- and diglycerides of fat forming fatty acids with which added diacetyl tartaric acid is combined. They are referred to as diacetyl tartaric acid esters of mono- and diglycerides. An analysis of the products of hydrolysis of a commercial lot showed acetic acid 15.5 percent, tartaric acid 17.5 percent, fatty acid 60.5 percent, and glycerol 12.5 percent of the weight of the article before hydrolysis. There may be slight variations in these percentages in different lots of the product as commercially produced.

Diacetyl tartaric acid esters of mono- and diglycerides have been mixed with flour and marketed for use in bakery products under a trade name since 1948. The mixture has been promoted by representations that it improves the shortening action. The enhancement of the action of shortening by the addition of mono- and diglycerides of fat forming fatty acids is mentioned in finding 5. Comparisons of breads made with and without the trade named mixture and with and without diacetyl tartaric acid esters of mono- and diglycerides added directly to the dough showed that there may be some improvement in quality by both such additions.

Pharmacological experiments with rats and dogs indicated that the diacetyl tartaric acid esters of mono- and diglycerides are split in the body and that the fatty portion is utilized for food. Diacetyl tartaric acid esters of mono- and diglycerides were shown to have little, if any, acute toxicity to rats and dogs. The chronic toxicity experiments, running throughout the life span of animals, were incomplete at the time of the hearing. When the exceptions were filed those experiments had been completed and the results of the completed work were attached to the exceptions. If this new evidence, which is now available, were placed in the record and not weakened by cross examination, it would be of a decisive character in establishing that diacetyl tartaric acid esters of mono- and diglycerides have little, if any, chronic toxicity. This product, like the mono- and diglycerides of fat forming fatty acids, is a surface active agent, and the significance of such action must be explored before a final decision can be reached as to its safety for use in bread. (R. 12840–12841, 12843–12844, 12865–12866, 13052, 13086, 13119–13125, 13231, 13239, 13254–13255, 13299, 13304, 13356, 13358–13359, 13387–13389, 13412–13413, 13542; Ex. 244, 246, 247)

7. The quantity of shortening used in bread dough varies widely. Some breads contain no shortening. The evidence affords no basis for concluding that the fixing of any maximum or minimum limits for shortening would serve consumer interest. The usual quantities of shortening are between 2 and 6 parts by weight for each 100 parts by weight of flour used, and seldom exceed 12 parts except in the cases of "sweet goods" and "specialty goods," products so distinctively different from bread and rolls as to be unlikely to be confused with bread or rolls by consumers. Such products usually contain from 12 to 30 parts of shortening. The possible effect of the use of products referred to as emulsifiers on the quantity of shortening used in bread and rolls is discussed in finding 39. (R. 366, 2543–2544, 2549, 2594, 2597, 17063–17064, 17069–17071; Ex. D, 383, 384)

8. Milk and various milk products are widely used in making bread and rolls and serve to improve their nutritive value and modify certain physical characteristics. In addition to fluid milk there have been used for these purposes, singly or in combination, concentrated milk, evaporated milk, sweetened condensed milk, dried milk, skim milk, concentrated skim milk, evaporated skim milk, sweetened condensed skim milk, sweetened condensed partly skimmed milk, and nonfat dry milk solids. (R. 73–75, 128–130, 438–440, 449; Ex. A)

9. In order that bread made with any of the ingredients specified in finding 8 may be set apart from milk bread, it is reasonable that such ingredients, together with any butter and cream used in bread, be so limited in quantity or composition as not to meet the requirements prescribed in findings 54 to 57, inclusive, for the quantity and composition of such ingredients in milk bread. (R. 74, 129)

10. Nonfat dry milk solids are widely used in the baking industry as an ingredient of bread and rolls. Occasionally bakers receive shipments of nonfat dry milk solids which have unsatisfactory baking qualities. The causes of poor baking qualities in these occasional lots of nonfat dry milk solids are not well understood. A proposal was made to permit the use of an optional ingredient in bread or rolls, consisting of nonfat dry milk solids that had been treated with calcium and magnesium oxides and to which soy flour was added. The mineral salts were said to neutralize any excess acidity of the product and improve its baking qualities. Testimony was incomplete relative to the type of nonfat dry milk solids used in preparing this combination, its acidity, and whether the properties of the finished mixture depended upon neutralization of the acidity of the nonfat dry milk solids. The evidence did not show that such modified nonfat dry milk solids had any better baking qualities by reason of the addition of calcium and magnesium oxide and soy flour. Calcium and magnesium oxides serve no useful purpose in bread and rolls. The use of soy flour as an ingredient of bread is described in other findings. (R. 14364–14366, 14386, 14393–14394, 14399, 14414, 14428–14429, 14463–14464, 14479, 14495–14496, 14516–14517, 14532–14536, 14543–14544, 14547, 14549–14551, 14563–14564)

11. During and shortly after the Second World War, nonfat dry milk solids were in short supply in the baking industry, and manufacturers of dairy products developed a dried cheese whey as a substitute for nonfat dry milk solids in bread and rolls. Dried cheese whey contains more lactose and less protein than nonfat dry milk solids. When prepared from proper raw materials, cheese whey is suitable for human food. Although the properties imparted to bread by cheese whey are not identical with those imparted by nonfat dry milk solids, cheese whey performs certain desirable functions in bread. However, when cheese whey is used in place of nonfat dry milk solids the loaf volume of bread is decreased. In order to make the action of dried cheese whey simulate that of nonfat dry milk solids on the mixing time and loaf volume of bread, some manufacturers experimented with cheese whey containing calcium sulfate or certain other calcium salts, and obtained a loaf volume comparable to that obtained with similar quantities of nonfat dry milk solids. In some of their experiments the cheese whey was first treated with sulfuric acid which was later neutralized by the addition of lime, thus forming calcium sulfate. Whether the use of this process actually changed some constituents of the whey or whether the added calcium sulfate increased the size of the loaves of bread in which this type of whey was used is not clear. The evidence does not show that the use in bread and rolls of cheese whey so processed would promote honesty and fair dealing in the interest of consumers. (R. 4844–4855, 4876–4881, 4895, 4915, 4918, 4922–4937, 4958, 4966, 5025–5026, 5034–5035, 5055–5056, 5062–5067)

12. Another ingredient of milk (usually prepared from whey but sometimes from skim milk) proposed for use in bread and rolls is a mixture of proteins consisting largely of albumin. The nutritive properties of these mixed proteins are very similar to those of casein, which supplies most of the protein in nonfat dry milk solids. Although formerly the cost of separating albumin from whey has been such that it has not been used to any substantial extent as a separate ingredient in foods, such albumin is a valuable food ingredient and serves somewhat the same purpose in bread as the proteins of nonfat dry milk solids. Albumin in amounts likely to be used would cause no noticeable change in the physical characteristics of the bread or rolls. (R. 14858–14861, 14864–14865, 14872–14876, 14929–14935; Ex. 319, 320)

13. Buttermilk, concentrated buttermilk, dried buttermilk, sweet cream buttermilk, concentrated sweet cream buttermilk, and dried sweet cream buttermilk, singly or in combination, are sometimes used in bread making, for purposes similar to those stated for the dairy ingredients specified in finding 8. (R. 75–76, 128, 1627–1629, 1638–1639)

14. Liquid eggs, frozen eggs, dried eggs, egg yolks, frozen yolks, dried yolks, egg white, frozen egg white, and dried egg white, singly or in combination with each other, are sometimes used in bread making, for the purpose of improving the nutritive value and imparting other desired characteristics. (R. 76, 130; Ex. A)

15. As the quantity of egg solids or egg-yolk solids in the dough is increased, the characteristics imparted to the baked product by such solids become more noticeable. The evidence does not establish the point at which the quantity of such solids results in products of identities different from bread and rolls, although the evidence indicates that such point lies between 2 parts and 5 parts for each 100 parts of flour. (R. 131, 2669–2672)

16. In making bread or rolls certain saccharine products are commonly used to furnish fermentable carbohydrates, to control the color of the crust, and to alter the taste, frequently to the extent of imparting some sweetness to the finished product. These include sugar, invert sugar (in sirup or congealed form), molasses (other than blackstrap molasses), light-colored brown sugar, refiners' sirup, dextrose, honey, glucose sirup, corn sirup, dried corn sirup, nondiastatic malt sirup, and nondiastatic dried malt sirup. All these products, used either singly or in combination with each other, are satisfactory for the purpose stated. (R. 76–77, 131, 712, 714–715, 740–741, 781, 785, 788, 795–797, 4598–4600, 4607, 4617; Ex. A)

17. Blackstrap molasses and dark-colored brown sugar, by reason of their color and other properties, are unsuitable for use in bread or rolls. Concentrated water extract of raisins and concentrated water extract of prunes have been proposed as saccharine ingredients in bread or rolls, but are not shown to be suitable for this purpose, especially because of their color and taste. (R. 670–672, 691, 743–744, 754–755, 1759–1761)

18. If carbohydrates are desired only for yeast fermentation, the quantity of saccharine substances added generally does not exceed 3 parts by weight, on a dry basis, for each 100 parts by weight of flour. When the baker wishes to produce some minor change in taste or in the appearance of the crumb or crust, increased quantities are used. Such baked products are considered by consumers as ordinary white bread or rolls unless they are definitely sweet or have acquired other definite characteristics from such ingredients. (R. 327, 359, 791, 1046–1047; Ex. D)

19. It is impracticable to prescribe a maximum limit for saccharine ingredients generally in white bread or rolls because of the wide differences in the respective sweetness and other characteristics of such ingredients and because even where sugar alone is used the evidence is not definite as to the quantity above which an article ceases to be ordinary bread and becomes sweet goods, although 16 parts by weight of sugar to each 100 parts by weight of flour appears to be near the average for sweet goods. (R. 2744, 2947, 2979, 2983, 2990; Ex. D)

20. Inactive dry yeast is occasionally used to impart a flavor, sometimes referred to as a "homemade flavor," to bread and rolls. If added in excess of 2 parts per 100 parts by weight of flour used, inactive dry yeast adversely affects the color of the crumb and crust. Inactive yeast of the Saccharomyces cerevisiae type, which is the type of yeast used for leavening, is suitable for the above purpose in quantities up to 2 parts per 100 parts by weight of flour used. Inactive yeast of the Torulopsis utilis variety was also proposed as an optional ingredient of bread and rolls. This type of inactive dry yeast is used to some extent in the United States as an ingredient of animal feeds and was used in Europe as a dietary supplement for humans during the wartime food shortages. Inactive dry yeast of the Torulopsis utilis variety has not been used in bread or rolls in the United States except experimentally. The evidence does not establish its suitability for use in bread and rolls. (R. 4707, 4716–4718, 4722–4725, 4728–4729, 15411–15412, 15423–15425, 15430–15433, 15468)

21. Malt sirup, dried malt sirup, malted barley flour, and malted wheat flour, each of which is diastatically active, are frequently used, singly or in combination with each other, in bread or rolls. These substances are generally used to compensate for a deficiency of natural enzymes in the flour used, and when used for this purpose alone the quantity is limited to about 0.25 percent of the weight of the flour. In certain kinds of hearth bread, however, quantities of malt sirup or dried malt sirup as high as 4 percent, or even higher, are used to improve the crust characteristics, especially the color of crust. (R. 505–509, 517–519, 522–523, 527–530)

22. The desired action of malt flour and diastatically active malt sirups in bread dough is primarily due to their content of certain enzymes that act upon the starch of the flour during the fermentation of the dough. The action of these enzymes is rather complex and affects the baking qualities of the dough in several ways. Recently it has been found that enzymes having a somewhat similar action on the starch of flour can be obtained from media in which certain molds, particularly Aspergillus oryzae, are grown. Purified preparations containing enzymes from Aspergillus oryzae are suitable for use in bread and rolls. The evidence indicated that it is possible to obtain enzymes having somewhat similar action from other microorganisms. The evidence was insufficient to establish suitability for use in bread and rolls of enzyme preparations from such sources. (R. 15031–15036, 15057, 15065–15066, 15072–15073, 15226–15228, 15358–15365; Ex. 40)

23. Consumers normally expect white bread and rolls to be essentially products of wheat flour. At various times in the past, however, when there has been a scarcity of wheat flour, other similar grain products, especially corn flour, have been extensively used to replace part of the flour in making bread and rolls. Potato mash is sometimes used to develop a preliminary yeast growth and is then incorporated in the dough. So-called dusting flour, often consisting in whole or in part of farinaceous products other than wheat flour, has long been in common use to prevent the dough from sticking to the receptacles or to machinery; a considerable proportion of such dusting flour becomes incorporated

in the dough. Dextrinized starch is believed by some to have the property of retaining moisture in bread after baking. The advisory standards issued by the Secretary of Agriculture for white bread, beginning with the first such standard in 1923, have all recognized the propriety of such practices to the extent of the replacement of not more than 3 percent of the wheat flour by some "other edible farinaceous substance." (R. 27, 30, 34, 77–78, 111–112, 1762–1764)

24. Products that have been used and are suitable for one or more of the purposes stated in finding 23 are corn flour or finely ground corn meal, potato flour, rice flour, cornstarch, milo starch, potato starch, sweetpotato starch, and wheat starch. Sometimes these products are wholly or in part dextrinized. Dextrinized wheat flour is also suitable for such use. In recent years soy flour has also been used in small amounts. At times one or more of such starches or flours are used in preparing pastes in which flavors are developed by the action of certain harmless souring organisms. These pastes are dried and the material used as an ingredient of bread or rolls for the purpose of slightly modifying their flavor. (R. 77–78, 105, 111–115, 132–133, 567–568, 4505, 4508, 4540, 4593–4595, 4736–4738, 4750–4751, 4753, 4764, 4782–4783; Ex. M, O)

25. Use in making white bread or rolls of any one or more of the products specified in finding 24, in a total quantity not greater than 3 parts by weight for each 100 parts by weight of wheat flour used, does not run counter to the normal expectation of present-day consumers. (R. 34, 49, 78, 133; Ex. A).

26. Subsequent to the hearing held in 1942, bakers and investigators in other fields experimented with the use of various quantities of soy flour in bread. Their experience shows that up to 3 parts of soy flour to 100 parts flour may be used without a substantial change in the physical characteristics of white bread. Within this limit, many bakers wish soy flour recognized as an optional ingredient for the purpose of aiding in baking, as described in finding 24, since soy flour was found suitable for this purpose.

As the proportion of soy flour is increased above 3 parts per 100 parts of flour, the taste, color, and other physical properties are detectably and progressively changed to an extent that differentiates such bread from white bread. Breads known as wheat and soy breads containing varying proportions of soy flour up to 15 parts per 100 parts of flour have been offered and sold for their improved nutritive value.

A bread containing 6 parts of soy flour and 8 parts of nonfat dry milk solids per 100 parts of enriched flour has been developed for aged persons of low income whose diets consist largely of bread. It has been used for feeding inmates of mental hospitals. It was suggested that its use would contribute beneficial protein supplementation for feeding school children and pregnant women of low income whose diets are low in protein. This bread has also been sold to the general public under the name "Golden Triple Rich Bread."

The addition of soy flour to white flour or enriched flour in making a bread increases its protein content and improves the nutritive value of the white flour protein by virtue of the supplementing effect through supplying certain essential amino acids which are characteristically low in the proteins of white flour. A similar supplementing effect is obtained in the normal diet from the protein of meat, fish, milk, eggs, and certain other high-protein foods. The addition of sufficient quantities of soy flour to wheat flour in making a bread thus serves a useful purpose to those consumers in whose diet such bread is the principal source of protein because they get little or no meat, milk, eggs and the like. The average daily consumption of bread by the population as a whole is about 5½ ounces. Upon this basis the addition of 6 parts of soy flour to 100 parts of flour will increase the daily protein intake by about 2 grams, which is about 3 percent of the National Research Council's recommended dietary allowance of protein for a moderately active man. The evidence does not establish that the mixed diets generally consumed in this country are low in protein content or poor in protein quality or that the daily addition of 2 grams of soy protein to diets generally would have any significantly beneficial effect.

It was urged by the advocates of the higher protein content bread referred to above that the standards for white bread and enriched white bread provide for the unlimited use of soy flour and other high-protein ingredients. This proposal would not serve the interests of those who need high-protein bread, since the inclusion of such bread in these standards would authorize by law its labeling as white bread or enriched bread, thus confusing it with the great mass of white bread and enriched bread on the market and making more difficult its selection by those who need high-protein bread. Fear was expressed that if the product now designated on its label as "Golden Triple Rich Bread" were required to be designated by any name other than "bread" unqualified or "white bread," its sale would be restricted. It is notable that the present label, which appears to misrepresent the product as three times as rich as enriched bread, bears neither the term "bread" unqualified nor "white bread."

If no top limit were placed on soy flour in white bread or enriched bread, products would be labeled and sold as such breads that are not of the color, taste, or texture of white bread or enriched bread; consumers would be misled, and their right to choose what they want would be restricted. Limiting the use of soy flour used as a baking aid in white bread and enriched bread does not limit its use in wheat and soy bread containing enough soy flour for significant nutritional improvement.

To the groups described above who need protein supplementation, breads of improved protein value are of nutritional importance. While the interest of such groups would be served by a definition and standard of identity for a kind of bread containing protein in high quality and quantity, the record of the hearing does not reveal sufficient facts concerning the kinds and quantities of ingredients that should be used and the characteristics of the finished bread to permit a conclusion as to what the requirements of such a standard should be to meet the needs of these groups by furnishing them with the quantity and kind of protein they need. By leaving high-protein breads unstandardized for the present, any kind of bread that is a substantial improvement with respect to protein over the kinds of bread for which standards are provided by this order can be freely sold under a designation which truthfully describes it. When further investigations reveal the incidence and extent of protein deficiency in the population, or special groups of the population, and the composition and characteristics of bread that will contribute significantly to its elimination, a definition and standard of identity to safeguard the integrity of that bread can be considered. (R. 4505, 4509–4510, 4669–4676, 14892, 14912, 14985–14986, 15507–15508, 15512–15513, 15522, 15526–15529, 15534, 15537–15538, 15545, 15557; Ex. 8–14)

27. Products referred to as peanut flour and cottonseed flour were proposed for use as optional ingredients in breads and rolls, in quantities up to 3 parts per 100 parts of flour. These products were said to serve the same purposes as the products described in finding 24 and also to contribute substantial nutritive values. Cottonseed flour was not proposed as an ingredient in white bread and rolls. Definitions and standards of identity are not being promulgated for the types of bread in which it was proposed to use cottonseed flour (see finding 69). The evidence does not show that peanut flour has been used to any material extent in making bread and rolls or that it is suitable for such use. (R. 538, 548, 613–630, 640, 1772, 3897–3908, 3910, 4572–4574, 4576–4577; Ex. 17)

28. Rolled oats, ground oatmeal, and oat flour were proposed as optional ingredients for inclusion with the products specified in finding 24, on the ground that such oat products are economical and nutritious foods and furnish a distinctive and desirable flavor. The evidence does not establish that any of these products have been used in making white bread and rolls, or their suitability for such use. (R. 1768–1769; Ex. P)

29. The evidence does not establish that the use of peanut flour or the products listed in finding 28 results in any significant improvement in nutritive properties when the quantities used are not more than 3 parts to each 100 parts of flour; it does indicate that the inclusion of such products in white bread would run counter to the normal expectation of consumers. The evidence furnishes no basis for a determination of what quantities of such products should be used with flour to produce breads of difference identities recognizable as such by consumers. (R. 624–627, 633–643, 1769–1772, 3914–3915, 3937–3938, 3942–3945, 4573, 4578)

30. Wheat germ processed in various ways to modify its enzymatic activity and to prevent rancidity has been used as an ingredient in some white bread. The processing may consist of heating it, treating it with potassium bromate, re-

moving part of the wheat germ oil, and possibly of treating it in other ways suggested but not described in the record. Such processed wheat germ was proposed as an optional ingredient for the purpose of imparting flavor and improving some of the physical characteristics of white bread. No proposal was advanced for recognition of the use of unprocessed wheat germ such as that naturally present in small amounts in flour. In the public mind, wheat germ is regarded as having extraordinary nutritive values the nature of which are not fully understood, and it has been sold primarily for its nutritive values. The testimony regarding benefits from the use of small amounts of processed wheat germ in white bread (1½ to 2 parts by weight of processed wheat germ per 100 parts by weight of flour) is not convincing. The use of processed wheat germ would tend to lead to representations that would be confusing to consumers with respect to identity and relative nutritive properties of bread with added wheat germ and enriched bread. The evidence showed that misrepresentations had been made with respect to the nutritive value of bread containing processed wheat germ, and such misrepresentations likely would be made if wheat germ were permitted as an optional ingredient. (R. 116–118, 569–609, 1765–1767, 3292–3293, 3296, 3298, 3367–3368; Ex. 3, 22)

31. Ground dehulled soybeans, with or without heat treatment and with or without removal of oil, but which retain their enzymatic activity, exert a bleaching action upon flour in bread dough. The use of such products in dough permits the production of light-colored bread or rolls from unbleached or slightly bleached flour. Substantial quantities of ground dehulled soybeans have been used for this purpose for many years. For this bleaching effect it is not necessary to use more than 0.5 part by weight of such a product to each 100 parts by weight of flour used. (R. 111–113, 165–166, 539–540, 545, 552–555, 3926–3933)

32. In making bread and rolls it has become a widespread practice among bakers to add to the dough small quantities of certain mineral salts, commonly known by such designations as yeast foods, dough conditioners, and bread improvers. Calcium and ammonium salts are used to stimulate the growth of yeast during fermentation. Other salts which act as oxidizing agents are used to affect the process of fermentation. The evidence indicates that the addition of so-called dough conditioners tends to lessen the variability in the qualities of the dough resulting from differences in characteristics of the flour used, differences in water supply, and other factors, and thereby to facilitate the handling of the dough in mechanized bakeries. (R. 78–82, 133–135, 838–858, 875–876, 892–900, 904–905, 995–999, 1014, 1034–1035, 1065, 1071–1074, 1080)

33. The calcium salts used for the purpose described in finding 32 are dicalcium phosphate, calcium sulfate, and calcium lactate. Calcium carbonate has a limited use in a so-called double-strength dough conditioner. Ammonium salts used for this purpose are monobasic and dibasic ammonium phosphates, ammonium sulfate, ammonium chloride, ammonium carbonate, and ammonium lactate. Ammonium carbonate and ammonium lactate, however, are no longer of commercial importance. It is not necessary to use any of these salts or any combination of them in a quantity greater than 0.25 part by weight for each 100 parts by weight of flour used. Monocalcium phosphate may be introduced into bread dough as an ingredient of some proprietary preparations known as dough conditioners or yeast foods, or as an ingredient of phosphated flour. Due to its calcium content, it functions similarly to the calcium salts mentioned previously in this finding. If the amount of monocalcium phosphate used is less than 0.25 part per 100 parts of flour, the acidifying action is not sufficient to furnish any appreciable preservative action. If the amount used exceeds 0.25 part, however, it does affect the acidity sufficiently to be classified as a preservative, as described in finding 49. (R. 78–81, 104, 133–135, 831, 838–840, 870, 883–884, 887–888, 990, 992–993, 4195–4196, 14301–14309)

34. The over-all effect of the use of varying kinds and quantities of oxidizing agents in bread dough is usually judged by the change in the size of the loaf in comparison with similar loaves baked from dough to which no oxidizing agents are added. The use of too large a quantity of an oxidizing agent is likely to cause a decrease in loaf volume.

The pharmacological evidence on potassium bromate, potassium iodate, and calcium peroxide, coupled with the long history of the use of these substances in bread, shows that in the amounts commonly used they do not leave residues or reaction products that are injurious to health. Because these oxidizing agents leave small residues (potassium bromate leaves a residue of potassium bromide, and potassium iodate a residue of potassium iodide) which serve no useful purpose in bread, it is desirable that the amounts of such substances used be restricted to a minimum. It is not necessary to use any of these oxidizing agents or any combination of them, including the potassium bromate contained in any bromated flour used, in a quantity greater than 0.0075 part by weight for each 100 parts by weight of flour used.

In 1942, sodium chlorite was proposed as an optional oxidizing agent. It was shown by rather limited experimental use to be suitable for use in bread. Although accorded tentative recognition in the proposed order published in 1943, additional evidence with respect to it and other oxidizing chemicals was particularly invited in the notice reopening the hearing, published October 14, 1948. No additional evidence as to its safety was presented nor was there any evidence that it has been used commercially or experimentally since 1943 or that there is any desire on the part of the baking industry to use this product.

Ammonium persulfate and potassium persulfate have been used to a limited extent as ingredients of so-called dough conditioners in the United States. These salts have at times been added to flour in countries other than the United States, for the purpose of affecting the properties of dough and bread made therefrom. There was evidence indicating that dough prepared from flour containing persulfates has been the cause of the sensitization of some persons handling it and that frequent handling of such dough caused allergic manifestations (dermatitis). The evidence does not justify the finding that ammonium persulfate and potassium persulfate are suitable ingredients for use in bread or that their use will promote honesty and fair dealing in the interest of consumers. (R. 78–81, 135–136, 840–841, 895–900, 933–935, 990–994, 13527–13528, 13541–13542, 13661–13663, 13694–15695, 13703, 13975, 14128, 14212, 14252, 16337–16344; Ex. 260–263, 271, 289–290, 292–295)

35. A product described as grain infusion was proposed for use as a yeast food and bread improver. It is a mixture of concentrated corn steepwater (neutralized with calcium carbonate) and dextrinized cornstarch, with added ammonium chloride, salt, and potassium bromate. The concentrated steepwater, a byproduct of the starch industry now generally used for cattle feed, is made by concentrating the liquid obtained by steeping corn in water containing 0.15 percent of sulfur dioxide. The so-called grain infusion as sold to the baker contains approximately 0.002 percent of sulfur dioxide, which is oxidized during fermentation and baking. The evidence does not establish that this so-called grain infusion is suitable for use in bread or that it improves the quality of bread otherwise than through the action of the calcium and ammonium salts and the potassium bromate contained in it. (R. 946–981, 1776, 2146–2175, 4106–4112, 4129–4130, 4134)

36. Amino acids, especially cystine, were proposed as a substitute for the oxidizing agents in bread or rolls. The evidence does not establish the suitability of such acids for this purpose. (R. 1773–1775; Ex. W)

37. Spice is sometimes added to bread or rolls, usually on the surface, but occasionally by incorporation in the dough. Spice oil and spice extracts have been used to a slight extent. Such additions materially affect the flavor of the bread or rolls. Consumers do not ordinarily expect such additions unless announced by appropriate label statement. Such statements which are accurate and informative are "spice added," "with added spice," or such statements in which the common or usual name of the spice is substituted for the word "spice." (R. 84, 1817–1820)

38. Bread is subject to deterioration and spoilage. The most common form of deterioration is staling. Old bread or stale bread is harder than fresh bread, its taste has changed, and it is almost universally regarded as less desirable than fresh bread. The length of time for staleness to develop varies, depending on several factors; but it is the common practice of many bakers to withdraw bread from sale 2 days after baking. Some bakers make a price concession on bread over 1 day old. (R. 435, 1162, 1407–1408, 1438–1440, 2365; Ex. FF, GG)

39. Since the issuance in 1943 of the tentative order proposing definitions and

standards of identity for bread, it was discovered that the addition to bread dough of small amounts of certain substances, referred to as surface-active agents or bread softeners, causes the bread baked from such dough to be more compressible and to feel softer when squeezed, during the period when wrapped bread is commonly held for sale at retail. Soon after this discovery, certain products containing one or more such substances were offered for sale to bakers. Three classes of compounds used independently of shortening were involved. One class includes compounds prepared by reacting sorbitol with a fatty acid. In the reaction the sorbitol loses moisture and the resulting product is a fatty acid ester of sorbitan. Compounds of this class are distributed under the trade name of Spans. Products of a second class are prepared by reacting a sorbitan ester of fatty acid with ethylene oxide. This reaction makes possible the addition to the sorbitan portion of the molecule of a predetermined number of ethylene-oxide groups. Compounds of this type prepared for use in food products theoretically contain from four to twenty such groups. They are distributed under the trade name of Tweens. A third class of compounds is prepared by reacting ethylene oxide directly with a fatty acid, or by first reacting ethylene oxide with water, forming a glycol, and then reacting this glycol with a fatty acid. There are a great number of compounds possible in each of these three classes, due to the possibility of using different fatty acids and different amounts of the ethylene oxide.

The classes of compounds known as Spans and Tweens were used in the baking industry in a limited way prior to the discovery that some surface-active agents made bread feel softer. Mixtures of Spans or Tweens or both with other substances were sold under trade names and represented for a time as useful to baking industry as synthetic egg substitutes. As bakers became acquainted with the properties of the various special products offered them, a compound of stearic acid and ethylene oxide (or a glycol and stearic acid) containing about 40 percent stearic acid (chemical name polyoxyethylene monostearate; widely used trade names Myrj 45 and Sta-Soft) became the most generally used in the baking of bread. It was distributed to the baking industry beginning early in 1947.

During the latter years of the Second World War practically all bakers reduced the proportion of shortening in bread. They began to return to prewar practices after orders of the War Food Administration regulating the use of the various ingredients of bread were rescinded. Shortening at this time was high in price, and there is reason to believe that some bakers were influenced in their decision to use a preparation containing a surface-active agent because of merchandising claims that its use would make possible a reduction in shortening without materially changing the properties of the finished bread.

Representations were made by a number of promoters of the use of polyoxyethylene monostearate that it retarded the staling of bread. Experience by bakers in the use of polyoxyethylene monostearate showed that 0.5 part to 100 parts of flour in bread dough made measurably softer bread, and that this effect was obtained even if no shortening was used. Experience further showed that breads in which polyoxyethylene monostearate was used remained softer over a period of days than breads of the same composition except that they contained no polyoxyethylene monostearate. Thus bakers using polyoxyethylene monostearate were able to place on the market breads which appealed to the large segment of consumers who choose bread because it feels soft upon squeezing the wrapped loaf at the time of purchase. Some bakers using polyoxyethylene monostearate in their bread advertised softness as an index to the freshness of their bread. No bakers, by advertisements or label statements, informed consumers of their use of a chemical to influence the softness of the bread. Abuses from the use of shortenings containing excessive amounts of mono- and diglycerides also occurred.

Softness and freshness are intimately connected in the minds of purchasers of bread. Undoubtedly a great many purchasers have been, and can be, led to believe by the feeling of softness of breads containing surface-active agents that such bread was not as old as it actually was. When these chemical softeners are used in bread, they make it easier for bakers and bread route drivers to engage in "bread rolling," or picking up old bread at one retail outlet and delivering it as fresh bread to another. This practice is condemned by responsible elements in the baking industry because they believe both the industry and the consumer's interests will be served if fresh bread, i. e. bread with a shelf life of no more than 2 days, is delivered to the retail purchaser.

Much testimony was submitted on the mechanism of the action of polyoxyethylene monostearate in bread and on the question of whether it causes bread to retain the properties of freshness, other than softness, for a longer time than bread baked without it. The evidence does not establish that polyoxyethylene monostearate causes the retention of such properties other than softness. (R. 4290–4291, 4384–4385, 4391, 4394–4404, 4420–4421, 5827–5828, 5835, 5957–5959, 5972–5975, 5977–5979, 5987–5988, 5991–5992, 6258, 6270–6272, 6330, 6362–6363, 6371, 6385, 6392, 7446–7448, 7518–7525, 7600, 7628–7629, 7679–7680, 8930, 9787–9788, 9793–9797, 10293, 10606, 10633, 10651, 10722, 10751, 11165–11193, 11226, 11240–11243, 11599–11601, 11938, 11954–11955, 11973, 12037–12038, 12058, 12083–12084, 12217–12218, 12221–12222, 12784–12785; Ex. 4–6, 57, 58, 96–99, 120, 128, 181–185, 202–206, 226)

40. There was evidence tending to show that some of the polyoxyethylene monostearate prepared for food use contained small amounts of poisonous glycols of low molecular weight, that is, ethylene glycol and diethylene glycol, probably in combination with stearic acid. Due to the type of chemical reactions involved in producing polyoxyethylene monostearate, either by combining ethylene oxide with water and the glycols so formed with fatty acids or by combining ethylene oxide directly with fatty acids, it is probable that a number of esters of varying molecular weights are formed. The esters so formed include those of higher and lower molecular weight than the particular ester desired. The evidence does not show that such esters of the higher and lower molecular weights are or can be removed in the ordinary manufacturing process. Some polyoxyethylene glycols of quite high molecular weight have been found to cause injury when fed to test animals, and it is possible that esters of such glycols with stearic acid, as well as similar esters of quite low molecular weight, are present in some of the polyoxyethylene monostearates sold to bakers. The range in quantity of such deleterious substances that might be present was not shown but the maximum is probably quite small. (R. 7447–7448, 7601–7602, 7628–7629, 7858–7859, 7863–7866, 8363; Ex. 96–99, 350–354)

41. Mono- and diglycerides of fat-forming fatty acids were recognized as an optional ingredient of oleomargarine in the definition and standard of identity adopted for that food in 1941 (21 CFR, Part 45). Prior to that time, they had been widely used in shortening and were generally recognized as safe. Evidence introduced at the initial hearings in 1941 on bread indicated that mono- and diglycerides were foods, and were assimilated in the same manner as triglycerides. There was also evidence as to their suitability and safety for use in bread at the hearings resumed in 1948. No testimony that would cast doubt on their safety was introduced, but it now appears that their surface-active effects before digestion have not been adequately investigated to permit a final decision that they are safe for use in bread which is regularly consumed in a life span.[1]

Sorbitan esters of fatty acids, polyoxyethylene sorbitan esters of fatty acids, and polyoxyethylene glycol esters of fatty acids were not used in bread until sometime after the bread hearings in 1941 and none were widely used until 1947. Related classes of compounds, including some of these groups, were proposed as optional ingredients of salad dressing and related foods at the hearing which began in late 1947 to establish definitions and standards of identity for these foods. The final order, in denying recognition of these classes, pointed out among other things that these compounds had not been adequately tested to determine their safety (15 F. R. 5229). However, the data on toxicity was by no means as extensive as was submitted at the 1948 bread hearings.

A number of feeding tests with animals, mostly rats, were reported, at the 1948 hearing, on compounds in the three groups mentioned. In those instances where the amount of the test substance added to the diet of the animals was 10 percent or more (dry basis) there was some evidence of an adverse effect on the animals. In those instances where

[1] See footnote 2.

the amount of test substance fed the animals was less than 5 percent, evidence of injury, if any, was not clear.

Most of the experiments extending for more than a few weeks were conducted by one investigator. These experiments are faulty in a number of respects. In some of the experiments only one level of the material being tested was fed to the experimental animals. These experiments did not include levels high enough to establish where the toxic level might be and so make it possible to determine what the margin of safety would be if the materials were used in bread in the amounts proposed. In most experiments animals of only one sex were used. It is always desirable in experiments involving the toxic properties of a substance to test its effect on male and female animals separately to determine if there are any different effects due to sex, as is often the case. In many instances the number of animals used was insufficient to permit sound conclusions to be drawn from the few animals surviving at the end of the test. The cause of the deleterious effects obtained with certain Tweens when fed at relatively high levels was not properly investigated.

From the tests of this investigator he concluded that the differences in growth rate, mortality, and pathological findings between the control animals and the experimental animals were unimportant, not significant, or not connected with the feeding of the test substances. The tests made by this investigator do not form a sound basis for these conclusions.

The mechanism by which the lower animal body and the human body eliminate these products has been the subject of study in both experimental animals and in human subjects. This scientific work indicates that polyoxyethylene monostearate is largely split into stearic acid and a glycol, and that the fatty acid portion is utilized for food. The glycol portion, according to some experiments, is largely absorbed and later eliminated unchanged in the urine. Other investigators, however, were never able to trace the fate of all the glycol portion, indicating the possibility of its oxidation in the body or the possibility of its conversion into substances not identified by the investigators. In general, experimental feedings indicated that only small portions, if any, of compounds of Span and Tween type were utilized for food. These substances appear to be excreted, for the most part, in the feces.

Experiments with polyoxyethylene monostearate and polyoxyethylene sorbitan mono-oleate (Tween 80) were conducted by giving these substances to human subjects, most of whom were under observation, following stomach operations. In the amounts given there was no indication of injury to these subjects and some indication of increased fat absorption in some of them. Tween 80 has been distributed under a proprietary name (not carrying the designation Tween) as a drug for use by physicians and on their prescription, in attempting to promote the absorption of fats in patients suffering from faulty fat absorption. No significant adverse effects were reported from such use, although a physician who had used the material would not recommend its use without medical supervision. Experimental feedings to groups of college students of solutions containing certain Spans and Tweens showed no apparent injury, but control over the subjects was so lacking that little reliance can be placed on the results reported.

Reports were made of the examination of the urine of persons and of animals to detect the possible appearance of oxalic acid when compounds containing the polyoxyethylene group were fed to them. None of these experiments showed an increase in oxalic acid in the urine which could be ascribed definitely to the ingestion of the polyoxyethylene compounds. However, urinary calculi of undetermined composition were found in the bladders of rats, some of which had received polyoxyethylene monolaurate and others polyoxyethylene monostearate.

There was testimony suggesting the possibility that surface-active agents containing the polyoxyethylene group may influence the absorption in the human digestive tract of substances contained in fats, such as cholesterol, and possibly of other ingredients. This possibility, however, appears to be largely conjectural. (R. 6380, 6480, 6487–6488, 6492–6494, 6496–6497, 6499–6500, 6504–6508, 6516–6522, 6525–6526, 6532, 6540–6546, 6549–6554, 6691–6692, 6910–6911, 6941, 7078, 7296–7300, 7304–7305, 7318–7319, 7383–7384, 7400–7403, 7732, 7751, 7754, 7768, 7796, 7823, 7827, 7955, 7999, 8002–8004, 8140–8142, 8169, 8196, 8303–8304, 8973, 9503, 9508–9511, 9525, 9528–9531, 9537, 9542, 9550, 9567, 9570, 9583, 9586, 10832, 11646, 11781, 11800–11802, 11804, 15398–15399, 15606, 15618, 15630, 15643–15644, 15646, 15682, 15716, 15718, 15752, 16115, 16136; Ex. 20, 59, 60–62, 76, 78, 78A, 84–90, 93, 94, 106, 113, 114, 132, 152, 153, 155–161, 163–167, 173, 174, 176, 177, 201, 211, 213, 216, 343–347, 347A, 357, 358)

42. Although the use of surface-active agents in bread may enable consumers to keep such bread longer before it hardens, it is doubtful that any substantial number of consumers have benefited by the use in bread of the three groups of substances described in the first paragraph of finding 39, or of excessive amounts of mono- and diglycerides. Deception of some consumers as to the age of bread purchased has resulted from the use in it of polyoxyethylene monostearate.

The consequences of the use of chemicals having any significant potentiality for harm in any food consumed as extensively and continuously as bread are of great importance to public health. The record should, but does not, show what the effect will be upon the public when these products are ingested constantly in bread. Their potentialities for harmful effect cannot be discounted because some of them were shown to contain constituents known to be poisonous. The record suggests the possibility that these surface-active agents may increase the susceptibility of animals to infectious disease organisms ingested with food. It does not supply the answer whether the surface-active agents have such effects or whether the effects would be significant in human infectious diseases. Although the record shows no definite evidence of injury from the use of Spans, Tweens, or polyoxyethylmonostearate in amounts in which they are likely to occur in the diet from their use in bread, the results of the pharmacological tests reported do not warrant the conclusion that there is no likelihood of injury from bread containing these substances in the amounts proposed to persons consuming its continuously over a life span.

Apart from their possible toxicity, the record as a whole does not warrant a conclusion that it would promote honesty and fair dealing in the interest of consumers to recognize sorbitan esters of fatty acids, polyoxyethylene sorbitan esters of fatty acids, and polyoxyethylene esters of fatty acids as optional ingredients in breads and rolls. (R. 6492–6494, 6497–6500, 6506–6508, 6522, 6525–6526, 6540, 6542, 6544, 6549–6554, 6716–6720, 6910, 7296–7300, 7304–7305, 7732, 7754, 7768, 7955, 7999, 9379–9380, 9508–9511, 9528–9531, 9537, 9542, 9550, 9567, 9586, 9797, 10832, 11600, 11646, 12218, 12784–12785, 15630, 15644, 15665–15669, 15682, 15690, 15698, 15701, 15716, 15718, 15972, 15974, 15983–15984, 15986, 15988, 15992, 15994, 16009, 16136; Ex. 59–62, 76, 78, 84, 86, 90, 147, 152, 153, 155–158, 160, 161, 163–165, 167, 173, 177, 181–185, 201, 343–346, 357, 358)

43. In addition to staling, bread is subject to spoilage from the growth of mold. If the surface of bread is moist it is a good medium for the growth of mold spores. The temperature of baking effectively destroys and mold spores in the dough, but such spores may be present in the bakery, and bread not suitably protected during and after cooling may become contaminated with such spores. When bread is sliced and wrapped, as is the common practice among large bakeries, the moisture remaining in the bread is held inside the wrapper, keeping the surface of bread moist and so creating a favorable environment for the growth of mold spores which may have accumulated on the surface of the loaf or of the slices prior to wrapping. Unwrapped bread from which moisture can evaporate readily is less likely to become moldy. Mold development on bread is most rapid in warm weather, especially when the humidity is high. (R. 1124–1137, 1140, 1143, 1270, 1481, 1500; Ex. AA)

44. The time necessary for the development of visible mold varies greatly, depending on a number of conditions. Under conditions most favorable to mold growth, a visible speck of mold may develop within 1 or 2 days after exposure of the bread to the spores. Under normal summer conditions, however, several days will elapse between the time of contamination and the appearance of a mold spot sufficiently large to be noticed. (R. 1143, 1409, 1413, 1473, 1490–1491)

45. A considerable number of bakers take no steps to protect their bread from mold other than controls within the bakery which tend to prevent contamination of the bread with mold spores. A few bakers have installed special precautionary devices for this purpose that are elaborate and beyond the means of

bakers generally. Methods available to most bakers do not wholly prevent contamination, and where this occurs in sufficient degree and conditions are favorable to mold growth losses of bread may follow. Many bakeries, and probably a majority of wholesale bakeries, have adopted the practice of adding to the dough, at least during summer months, some substance that will retard the growth of mold on the bread. Proposals were made to recognize as optional ingredients for this purpose sodium and calcium propionates and sodium diacetate. (R. 1138–1139, 1151, 1154, 1476–1479, 1673, 1674, 3879–3880, 3986, 4046–4047; Ex. X, QQ)

46. In addition to spoilage from mold, decomposition and spoilage in bread are caused on rare occasions by the growth inside the loaf of a type of bacterium which, in spore form, can survive the temperature of baking. This bacterium, Bacillus mesentericus, causes spoilage which in advanced stages is characterized by an unpleasant odor and a pasty consistency of the center of the loaf. This pasty material will pull out into fine threads, and such bread is said to be "ropy." B. mesentericus is known as the rope-forming organism. (R. 1163–1164, 1166, 1231, 1425, 2658, 2993–2994, 3001, 3820–3822, 4045)

47. Technical experts in the baking industry are not entirely in agreement as to how the rope organism enters bread dough, but they generally agree that the most probable means is through use in preparing the dough of raw materials contaminated with numerous spores of the organism. There is some possibility that spores may be airborne and enter the dough from the air circulating in the bakery. In order for spoilage from rope organisms to develop in bread there must be a combination of circumstances where a considerable number of spores enter the dough and where the bread is held for some time after baking at a high temperature under conditions whereby the moisture in the bread is retained. Where such a combination of circumstances is present, large losses may occur from such spoilage. (R. 1165–1167, 1169, 1353–1354, 1495, 2190, 3813, 3819, 3824; Ex. HH, II)

48. A considerable number of bakers take no steps for the protection of bread from rope other than to use ingredients sufficiently low in spore content. The ordinary baker, however, has no means of quickly testing ingredients to determine if they are contaminated with rope-forming organisms and must rely upon suppliers to furnish ingredients that are safe to use. Much progress has been made by suppliers in safeguarding their products. Many bakers, however, probably including a majority of wholesale bakers, at some time during the year add some type of ingredient to dough as additional assurance against rope development. (R. 1174, 1294–1298, 1502, 3826, 3832, 3870–3871, 4042, 4044; Ex. HH, WWWW)

49. It was found several years ago that materials that render the dough slightly more acid than normal are effective in preventing the development of the rope organism. The necessary increase in acidity is frequently effected by adding about a pint of 100-grain vinegar for each 100 pounds of flour used in the dough. Another product used by bakers for increasing acidity is monocalcium phosphate, which is the acidifying ingredient in phosphated flour. About ¼ pound or more of monocalcium phosphate for each 100 pounds of flour increases acidity sufficiently for this purpose, or phosphated flour may be used. Other acids that are said not to interfere with yeast growth have also been tried to a limited extent. Lactic acid, in a quantity sufficient to reduce the pH of the bread to not less than 4.5, has recently been found to be a suitable acidifying ingredient of the dough for the purpose of preventing or retarding the growth of certain spore-forming organisms, the spores of which are not destroyed in the baking process. Sodium and calcium propionates have been found to be effective in retarding the growth of rope organism without a significant change in acidity. Sodium diacetate, which liberates acetic acid in the dough, has been used in lieu of vinegar and monocalcium phosphate against the possibility of spoilage due to rope. (R. 137, 1040, 1170, 1174, 1183–1184, 1644, 1674–1679, 3918, 3968–3969, 3976–3977, 4771–4773; Ex. JJ, KK)

50. The quantity of calcium propionate or sodium propionate or both used in white bread for the purposes indicated in findings 45 and 49 need not exceed 0.32 part by weight for each 100 parts by weight of flour used. The quantity of sodium diacetate used for such purposes need not exceed 0.4 part by weight. The quantity of any vinegar used for the purposes indicated in finding 49 need not exceed 1 pint of any vinegar of 100-grain strength for each 100 pounds of flour used or corresponding amounts of vinegar of less strength to furnish an equivalent amount of acetic acid. The quantity of monocalcium phosphate used for the purposes indicated in finding 49 exceeds the amount used as a yeast food (for which purpose the maximum amount used is 0.25 part for each 100 parts by weight of flour used) but does not exceed 0.75 part for each 100 parts by weight of flour. (R. 1322–1323, 1413, 1486, 1649, 1680, 1687, 3964, 3969, 3976, 3977; Ex. X)

51. The evidence shows that a substantial proportion of bakers do not consider that they have a mold or rope problem and that they use none of the substances referred to in finding 49. Most bakers consider that they do have a mold or rope problem during the months of relatively high temperature, particularly when the humidity is high, and these bakers use such substances during those months. Some bakers consider that they have a mold and rope problem throughout the entire year and use such substances continuously. The evidence suggests the possibility that the use of such substances may result in practices contrary to consumer interest, but does not show that such practices exist or are likely to develop. (R. 1412, 1428–1429, 1453–1459, 1478–1479, 1495, 1697, 2187–2191, 3003–3005, 3879, 3880, 3935, 4016–4047; Ex. QQ)

52. All the substances used as set forth in findings 49 and 50 act as preservatives in bread and rolls in that they delay spoilage. All such substances, except vinegar are chemicals within the usual meaning of the term. (R. 2046–2048, 2050)

53. The foods commonly and usually known as milk bread and milk rolls or milk buns differ from bread and rolls primarily in that they contain a certain minimum of milk solids. Findings 2 to 7 and 14 to 53, inclusive, are applicable to milk bread and milk rolls. (R. 35, 1830, 1831, 2415, 2527, 2586; Ex. A)

54. Milk bread is prepared in the home, and to a considerable extent in commercial bakeries, by using milk as the sole ingredient for moistening the flour and other ingredients to make the dough. However, many bakers use, instead of milk, various milk products (with or without water), containing essentially the same quantity of milk solids as would be supplied by milk when it is used as the sole wetting agent. Milk products used for this purpose, and which are suitable for such use, are concentrated milk, evaporated milk, sweetened condensed milk, dried milk, and reconstituted milk (see finding 56). (R. 1836–1837, 2527–2528; Ex. A, III)

55. The solids of milk may be divided into two well-recognized components, milk fat and nonfat milk solids. The relative proportion of fat and nonfat milk solids varies somewhat, but in milk of average composition as delivered to consumers the quantity of nonfat milk solids is not more than 2.3 times the quantity of milk fat. In milks of greater richness than average milk the fat content may rise to a point where the nonfat milk solids is about 1.2 times the milk fat. (R. 1838, 2371–2383, 2529; Ex. 4, AAA, LLL)

56. The ingredients used to supply milk-constituent solids in the reconstitution of milk for making milk bread are skim milk, concentrated skim milk, evaporated skim milk, sweetened condensed skim milk, sweetened condensed partly skimmed milk, and nonfat dry milk solids or any two or more of these, combined with butter or cream or both. Unless a maximum limit is set on the proportion of nonfat dry milk solids to milk fat in reconstituting milk, abuses can easily arise through the use of decreasing quantities of milk fat and increasing quantities of the less expensive nonfat milk solids. It is reasonable to require that when reconstituted milk is used the proportion of nonfat milk solids to milk fat fall within the range set forth in finding 55. (R. 444–447, 1830, 1833, 1836, 1838, 1846, 2507, 2509; Ex. 2, III)

57. The quantity of water necessary to make flour into dough varies somewhat, but it is generally about 60 pounds to each 100 pounds of flour, and in practically no case is less than 58 pounds to 100 pounds of flour. In milk of average composition, 58 pounds of moisture is associated with 8.23 pounds of milk solids. A reasonable minimum requirement for milk solids in milk bread made with dairy ingredients other than fluid milk is 8.2 pounds to each 100 pounds of flour. Because of variation in the total solids

content of fluid milk and because of differences in the quantity of moisture absorbed in making the dough, it would not be reasonable to prescribe a minimum based on the average composition of milk for the milk solids content of milk bread when fluid milk is used as the sole moistening ingredient. (R. 452–454, 1840, 2445–2446, 2565, 2566, 2607)

58. Milk bread is generally considered by consumers to be made from milk and not from buttermilk. Buttermilk and its products, such as those listed in finding 13, are not appropriate ingredients of milk bread. (R. 443, 1840–1842, 2419)

59. In the announcement of the hearing definitions and standards of identity were proposed for:

Cream bread and cream rolls or cream buns.

Butter bread and butter rolls or butter buns.

Egg bread and egg rolls or egg buns.

Butter and egg bread and butter and egg rolls or butter and egg buns.

Honey bread and honey rolls or honey buns.

Milk and honey bread and milk and honey rolls or milk and honey buns.

In each instance the American Bakers Association proposed other definitions and standards differing from the proposals for hearing chiefly in that they would require substantially less amounts of the ingredients indicated by the names of the various kinds of bread and rolls or buns. (R. Ex. 1. Also see page references under finding 60)

60. The quantities of the characterizing ingredients specified in the published proposal and the quantities recommended by the American Bakers Association are shown in the following tabulation ("parts" signify parts by weight for each 100 parts by weight of flour used in preparing dough):

	Published proposals	Proposals by American Bakers Association
Cream bread, Cream rolls, Cream buns	12 parts of milk fat from cream or combination of milk fat and nonfat milk solids in certain specified proportions.	4 parts of milk fat.
Butter bread, Butter rolls, Butter buns	12 parts of milk fat from butter	Do.
Egg bread, Egg rolls, Egg buns	5 parts of egg solids	2 parts of egg solids.
Butter and egg bread, Butter and egg rolls, Butter and egg buns	12 parts of milk fat from butter, 5 parts egg solids.	4 parts of milk fat, 2 parts of egg solids.
Honey bread, Honey rolls, Honey buns	16 parts of honey solids	4 parts of honey solids.[1]
Milk and honey bread, Milk and honey rolls, Milk and honey buns	Milk content same as for milk bread, 16 parts honey solids.	Milk content same as for milk bread, 4 parts of honey solids.

[1] Three parts of honey solids was recommended by a witness introduced by the American Bakers Association (R. 2868, 2870).

(R. 1849–1854, 2423–2425, 2427–2428, 2476–2479, 2552–2555, 2568, 2623–2625, 2638, 2644–2645, 2673, 2703, 2713, 2717, 2739–2746, 2755–2757, 2759–2760, 2795–2796, 2820, 2837–2838, 2846, 2933, 2965, 3046–3047, 3049–3051, 3061, 3068)

61. There have been sold at times under the names of the products listed in finding 60, or under similar names, breads containing little or none of the ingredients for which the breads have been named. This practice has not been widespread. The amount of such bread is small in comparison with the total amount of bread sold, but this practice has tended to mislead the consumer, giving the impression that these ingredients are used in such substantial amounts as to characterize the breads. (R. 1851, 1854, 2339–2340, 2476, 2478, 2497–2498, 2617–2620, 2625, 2627, 2631, 2640, 2740–2742, 2788, 2910–2911, 3044–3046, 3058–3060; Ex. III)

62. The evidence does not establish that products containing these ingredients in the quantities proposed by the American Bakers Association (see finding 60) are distinguishable by the ordinary consumer from the product commonly known as bread or white bread. It is not shown that benefit to consumers would result from the promulgation of definitions and standards of identity for these products as proposed by the American Bakers Association. (R. 2495, 2552–2553, 2555, 2569, 2621–2624, 2632, 2641, 2672, 2742–2743, 2795–2797, 2807, 2820, 3036–3037, 3039, 3046, 3049, 3051)

63. There is not shown to be, nor is there likely to develop, a demand on the part of consumers for bread or rolls containing the quantities of these ingredients in the published proposals that were supported by the Food and Drug Administration (see finding 60). The evidence does not establish that such proposed definitions and standards of identity would be reasonable. (R. 1851, 2427, 2476, 2498, 2553, 2570, 2700, 2713–2715, 2867–2868, 2931–2932, 2965–2966)

64. The foods commonly and usually known as raisin bread and raisin rolls or raisin buns differ from bread and rolls primarily in that raisins are added to the dough before baking. Seedless (or seeded) raisins are suitable for such use. They are usually washed and are often soaked in water before being added to the dough. Except as noted in findings 66 and 67, findings 2 to 52, inclusive (except finding 9), are applicable to raisin bread and raisin rolls. (R. 35–36, 3076–3084, 3086–3091, 3093–3097)

65. The quantity of raisins used in making raisin bread varies somewhat. A minimum requirement for raisins based on the weight of the raisins in the loaf was contained in the advisory standard for raisin bread promulgated some years ago. A more understandable requirement from the standpoint of the baker is a specification of the weight of raisins (before soaking or washing) used with each 100 parts by weight of flour. The requirement of the advisory standard calculated to this basis is about 35 parts of raisins to each 100 parts of flour. In recent years it has become the practice of most bakers to use substantially more raisins, and a minimum requirement of 50 parts of raisins to each 100 parts of flour now conforms more nearly to consumer preference and good bakery practice. (R. 35–36, 3076–3080, 3088–3090, 3093–3097; Ex. 2, III, TTT, UUU, VVV)

66. When making raisin bread some bakers use as a saccharine ingredient a raisin sirup made by concentrating a water extract of raisins (referred to in finding 16). Such an extract is suitable for use in raisin bread, but such raisin extractives as are incorporated in this manner do not take the place of raisins used in making the raisin bread. Raisin bread and raisin rolls are sometimes prepared with an icing or frosting. (R. 3080, 3125)

67. The method of determining total solids, described in finding 4, must be modified slightly to be applicable to raisin bread and raisin rolls, in order to insure the proper mixing of raisins in the sample. This can be accomplished by passing the sample twice through a food chopper and then taking a portion for solids determination without attempting to pass the ground sample through a 20-mesh sieve. (R. 3086–3087; Ex. 2)

68. The foods commonly and usually known as whole wheat bread, graham bread, entire wheat bread, and whole wheat rolls, graham rolls, wheat rolls, or whole wheat buns, graham buns, and entire wheat buns differ from white bread and white rolls only in that the dough is made with whole wheat flour or bromated whole wheat flour, and no flour, bromated flour, or phosphated flour is used therein. Findings 2 to 52, inclusive (except finding 9), are applicable to whole wheat bread and whole wheat rolls, except that the maximum limit for propionates (see finding 50) is 0.38 part by weight to each 100 parts by weight of whole wheat flour used. (R. 34–35, 1323, 1413, 3126–3135, 3160–3161; Ex. 2, A)

69. A number of different kinds of bread and rolls are prepared in which the dough is made from mixtures of two or more of the following wheat ingredients: flour (including bromated flour and phosphated flour); whole wheat flour; cracked wheat; crushed wheat. By varying the proportions of the wheat ingredients it is possible to produce a great many different varieties of breads in this general class. The evidence does not warrant conclusive findings as to what limits, if any, should be established for such wheat ingredients. Some of the breads in this class are sold for special dietary uses and often contain added vitamin or mineral supplements of different kinds in varying amounts. There is insufficient evidence to establish the need or desirability of such enrichment and, if provided for, what the nature and extent of such enrichment should be. There was controversy as to how breads in this class should be named. Although the volume of such breads produced is large, their relative proportion, compared to white bread, is small. Further evidence is necessary with respect to breads of this class before definitions and standards of identity can be promulgated for

them. (R. 38, 1323, 1413, 3135–3158, 3160–3161; Ex. 5–7)

70. "Enriched bread" and "enriched rolls" or "enriched buns" are the common and usual names of baked products identical with bread and rolls, respectively, except that they contain added nutrients and are not subject to the limitations indicated in finding 9. The reasons for enriching flour and for regulating such enrichment are applicable to enriched bread and enriched rolls; such reasons are set forth in findings 33 to 41, inclusive, of the order prescribing a definition and standard of identity for enriched flour (6 F. R. 2574), as modified and supplemented by findings 1 to 11, inclusive, of the order amending that definition and standard of identity (8 F. R. 9115). The basis for requiring or permitting the particular enriching ingredients and the particular quantities thereof specified in such findings is also applicable to enriched bread and enriched rolls. Findings 2 to 52, inclusive (except findings 9 and 30), are applicable to enriched bread and enriched rolls. (R. 3241–3255)

71. The quantities of vitamins and minerals in enriched bread and enriched rolls are those which result from the use of enriched flour or enriched bromated flour in lieu of flour, bromated flour, or phosphated flour. These quantities may be contributed by any of the following methods, or by any two or more of them in combination:

1. Enriched flour or enriched bromated flour is used, in whole or in part.

2. The substances used for enriching flour (including wheat germ or partly defatted wheat germ in a quantity not more than 5 parts by weight to each 100 parts of flour, bromated flour, and phosphated flour used) are added in making the dough, under the conditions permitted by 21 CFR 15.10, for the addition of such substances in preparing enriched flour.

3. Ingredients of bread which contain such vitamins or minerals (e. g., yeast, dried skim milk, monocalcium phosphate) are used within the limits, if any, for such use in bread. (R. 3241; Supp. R. 375, 843, 893, 900, 958, 961)

72. It would not be reasonable to subject enriched bread or enriched rolls to any requirement for or limitation on enrichment that cannot be met in ordinary commercial practice by the use of any enriched flour which conforms to the definition and standard of identity prescribed in 21 CFR 15.10. (R. 3320)

73. The flour content of enriched bread and enriched rolls varies from a minimum of about 60 percent to a maximum of about 75 percent, depending upon such factors as the quantity of ingredients other than flour used and the moisture content of the finished products. In baking such products there is some loss of vitamins, mostly through destruction in the crust. Such losses of niacin, riboflavin, and vitamin D are negligible, and in the cases of niacin and riboflavin are compensated by some contribution of these vitamins by yeast and other ingredients commonly used. Except as noted for thiamine, riboflavin, and calcium in findings 74, 75, and 76, minima for the vitamins and minerals in enriched bread and enriched rolls of 60 percent of the minima prescribed for enriched flour, and maxima of 75 percent of the maxima for enriched flour, are, when rounded off to the nearest significant decimal point, reasonable limits when enriched flour is used to make enriched bread and enriched rolls. On this basis each pound of enriched bread or enriched rolls contains not less than 10 milligrams nor more than 15 milligrams of niacin; not less than 8 milligrams nor more than 12.5 milligrams of iron; and when the optional ingredient vitamin D is used, not less than 150 U. S. P. units nor more than 750 U. S. P. units of such vitamin. It would not be reasonable to prescribe minima and maxima for vitamins and minerals, when they are added in making the dough, different from the minima and maxima prescribed when enriched flour is used. An unnecessarily wide spread between minima and maxima would likely lead to competitive increases between manufacturers, accompanied by such advertising claims as would confuse consumers as to their nutritionary needs and the value of enriched bread in supplying those needs. Consumer understanding of the value of enriched bread will be promoted by requiring its composition to be as nearly uniform as practicable as to both quantities and kinds of nutritive factors present. (R. 3241–3252, 3306, 3466–3472, 3474–3488, 3692–3696, 3770–3782, 3786–3800; Supp. R. 287, 362–364, 645, 648, 649, 844–854)

74. In baking enriched bread and enriched rolls losses of thiamine are appreciable. However, if flour enriched to the minimum of 2 milligrams of thiamine per pound is used there is sufficient contribution of thiamine from the yeast and other ingredients customarily added that in common commercial practice the finished products contain not less than 1.1 milligrams of thiamine per pound. If flour enriched to a maximum of 2.5 milligrams per pound is used, the thiamine content of the finished products, after due allowances are made for contributions from such ingredients and for baking losses, will not exceed 1.8 milligrams per pound. (R. 3242–3251, 3466–3472, 3474–3488, 3770–3782; Supp. R. 363–368, 372, 647, 844–854)

75. Yeast and milk or its products used in making enriched bread and rolls may contribute as much as 0.48 milligram of riboflavin per pound of bread or rolls. When these are used with enriched flour containing 1.5 milligrams of riboflavin per pound, the riboflavin content of the enriched bread or enriched rolls may approach 1.6 milligrams per pound. When milk and its products are not used, and the enriched flour contains the minimum 1.2 milligrams of riboflavin per pound, the riboflavin content of the enriched bread or enriched rolls may fall to nearly 0.7 milligram per pound. (Supp. R. 844, 848)

76. Nonfat dry milk solids, so-called bread improvers, rope inhibitors, and other optional ingredients used in making bread and rolls may contribute nearly 300 milligrams of calcium per pound to bread or rolls. When these are used with enriched flour containing 625 milligrams of calcium per pound, the calcium content of the enriched bread or enriched rolls may approach 800 milligrams per pound, particularly if water used in making the dough is high in calcium. When these are not used and the enriched flour contains the minimum of 500 milligrams of calcium per pound the calcium content of the enriched bread or enriched rolls may fall to about 300 milligrams per pound. (Supp. R. 849, 858)

77. The following are reasonable limits for the specified vitamins and minerals in enriched bread and enriched rolls or enriched buns:

	Minimum	Maximum
Required ingredients:		
Thiamine	1.10 milligrams per pound	1.8 milligrams per pound.
Niacin	10.0 milligrams per pound	15.0 milligrams per pound.
Riboflavin	0.7 milligram per pound	1.6 milligrams per pound.
Iron	8.0 milligrams per pound	12.5 milligrams per pound.
Optional ingredients:		
Calcium	300 milligrams per pound	800 milligrams per pound.
Vitamin D	150 U. S. P. units per pound	750 U. S. P. units per pound.

(Supp. R. 153, 157, 159, 160–162, 221, 278–280, 312–313, 386–388, 773–774, 797–798, 843–848, 888)

78. Several proposals were made to require label declarations of certain optional ingredients used in bread. There was testimony indicating that some ingredients of bread are causes of allergic manifestations, and that consumers who are sensitive to such ingredients might be benefited by label declaration of these ingredients. There was conflicting testimony as to the prevalence of food allergies and the extent to which the ingredients of bread are the causative agents. The evidence does not indicate that a significant proportion of consumers are sensitive to any particular optional ingredient whose presence in bread would not be expected without label declaration, or would benefit by label declarations of any or all of the optional ingredients used in bread.

A witness representing the Union of Orthodox Jewish Congregations of America, Inc., recommended that the origin and type of shortening used in bread be stated on the label, so that those persons who wished to observe the Jewish dietary laws might avoid the purchase of bread containing "non-kosher" fat. It was not shown that a significant number of persons observing the Jewish dietary laws would benefit by such a label declaration.

A witness appearing on behalf of the American Home Economics Association recommended that bread be labeled to show all the ingredients used in excess of 1 percent of the weight of the flour, the number of calories in a specified unit of weight, the percentage of protein in the loaf, and the maximum percentage of water in the loaf. The standards making provisions of the Federal Food, Drug, and Cosmetic Act do not authorize

a requirement for label declaration of the percentages of ingredients or nutritive properties of foods except in unusual circumstances which do not exist here. (R. 5635–5640, 14596–14630, 14685–14687, 14729–14730, 14743, 14744–14748, 14752–14758, 14765, 14768, 14782–14783, 14809–14810, 14812–14813, 14839, 14847–14848, 15545–15548)

Conclusions. Upon consideration of the whole record and the foregoing findings of fact, it is concluded that the adoption of the following definitions and standards of identity for various kinds of breads and rolls or buns will promote honesty and fair dealing in the interest of consumers:

Sec.

17.1 Bread, white bread, and rolls, white rolls, or buns, white buns; identity; label statement of optional ingredients.

17.2 Enriched bread and enriched rolls or enriched buns; identity; label statement of optional ingredients.

17.3 Milk bread and milk rolls or milk buns; identity; label statement of optional ingredients.

17.4 Raisin bread and raisin rolls or raisin buns; identity; label statement of optional ingredients.

17.5 Whole wheat bread, graham bread, entire wheat bread, and whole wheat rolls, graham rolls, entire wheat rolls, or whole wheat buns, graham buns, entire wheat buns; identity; label statement of optional ingredients.

AUTHORITY: §§ 17.1 to 17.5 issued under 52 Stat. 1043, 1055; 21 U. S. C. 341, 371.

§ 17.1 *Bread, white bread, and rolls, white rolls, or buns, white buns; identity; label statement of optional ingredients.* (a) Each of the foods bread, white bread, rolls, white rolls, buns, white buns is prepared by baking a kneaded yeast-leavened dough, made by moistening flour with water or with one or more of the optional liquid ingredients specified in this section or with any mixture of water and one or more of such ingredients. The term "flour," unqualified, as used in this section, includes flour, bromated flour, and phosphated flour. The potassium bromate in any bromated flour used and the monocalcium phosphate in any phosphated flour used shall be deemed to be optional ingredients in the bread or rolls. Each of such foods is seasoned with salt, and in its preparation one or more of the optional ingredients prescribed by subparagraphs (1) to (14), inclusive, of this paragraph may be used:

(1) Shortening, in which or in conjunction with which may be used lecithin, mono- and diglycerides of fat-forming fatty acids (except lauric acid), or diacetyl tartaric acid esters of mono- and diglycerides of fat-forming fatty acids (except lauric acid), or a combination of two or more. The total weight of mono- and diglycerides, including diacetyl tartaric acid esters of mono- and diglycerides of fat-forming fatty acids, used does not exceed 20 percent by weight of the combination of such a preparation and the shortening, and the total amount of monoglyceride in such mixture does not exceed 8 percent by weight of the combination; but if purified or concentrated monoglyceride is used the amount of such a preparation does not exceed 10 percent by weight of the combination of such preparation and the shortening. For the purposes of this section the lecithin may include related phosphatides derived from the corn or soya-bean oil from which the lecithin was obtained.

(2) Milk, concentrated milk, evaporated milk, sweetened condensed milk, dried milk, skim milk, concentrated skim milk, evaporated skim milk, sweetened condensed partly skimmed milk, sweetened condensed skim milk, nonfat dry milk solids, or any combination of two or more of these; except that any such ingredient or combination, together with any butter and cream used, is so limited in quantity or composition as not to meet the requirements for milk or dairy ingredients prescribed for milk bread by § 17.3.

(3) Buttermilk, concentrated buttermilk, dried buttermilk, sweet cream buttermilk, concentrated sweet cream buttermilk, dried sweet cream buttermilk, cheese whey, concentrated cheese whey, dried cheese whey, milk proteins, or any combination of two or more of these.

(4) Liquid eggs, frozen eggs, dried eggs, egg yolks, frozen egg yolks, dried yolks, egg white, frozen egg white, dried egg white, or any combination of two or more of these.

(5) Sugar, invert sugar (in congealed or sirup form), light-colored brown sugar, refiner's sirup, dextrose, honey, corn sirup, glucose sirup, dried corn sirup, dried glucose sirup, nondiastatic malt sirup, nondiastatic dried malt sirup, molasses (except blackstrap molasses), or any combination of two or more of these.

(6) Malt sirup, dried malt sirup, malted barley flour, malted wheat flour, each of which is diastatically active; harmless preparations of enzymes obtained from Aspergillus oryzae, or any combination of two or more of these.

(7) Inactive dried yeast of the genus Saccharomyces cerevisiae; but the total quantity thereof is not more than 2 parts for each 100 parts by weight of flour used.

(8) Harmless lactic-acid producing bacteria.

(9) Corn flour (including finely ground corn meal), potato flour, rice flour, wheat starch, cornstarch, milo starch, potato starch, sweet potato starch (any of which may be wholly or in part dextrinized), dextrinized wheat flour, soy flour, or any combination of two or more of these; but the total quantity thereof is not more than 3 parts for each 100 parts by weight of flour used.

(10) Ground dehulled soybeans, which may be heat-treated and from which oil may be removed, but which retain enzymatic activity; but the quantity thereof is not more than 0.5 part for each 100 parts by weight of flour used.

(11) Calcium sulfate, calcium lactate, calcium carbonate, dicalcium phosphate, ammonium phosphates, ammonium sulfate, ammonium chloride, or any combination of two or more of these; but the total quantity of such ingredients is not more than 0.25 part for each 100 parts by weight of flour used.

(12) Potassium bromate, potassium iodate, calcium peroxide, or any combination of two or more of these; but the total quantity thereof (including the potassium bromate in any bromated flour used) is not more than 0.0075 part for each 100 parts by weight of flour used.

(13) (i) Monocalcium phosphate, but the total quantity thereof, including the quantity in any phosphated flour used and any quantity added, is not more than 0.75 part by weight for each 100 parts by weight of flour used; or

(ii) A vinegar, in a quantity equivalent in acid strength to not more than 1 pint of 100-grain distilled vinegar for each 100 pounds of flour used; or

(iii) Calcium propionate, sodium propionate, or any mixture of these, but the total quantity thereof is not more than 0.32 part for each 100 parts by weight of flour used; or

(iv) Sodium diacetate, but the quantity thereof is not more than 0.4 part for each 100 parts by weight of flour used; or

(v) Lactic acid, in such quantity that the pH of the finished bread is not less than 4.5.

(14) Spice, with which may be included spice oil and spice extract.

Each of such foods contains not less than 62 percent of total solids, as determined by the method prescribed in "Official Methods of Analysis of the Association of Official Agricultural Chemists," Seventh Edition, 1950, page 209, section 13.70, under "Total Solids in an Entire Loaf of Bread," except that if the baked unit weighs 1 pound or more one entire unit is used for the determination, and if the baked unit weighs less than 1 pound, such number of entire units as weigh 1 pound or more is used for the determination.

(b) Bread, white bread is baked in units each of which weighs one-half pound or more after cooling. Rolls, white rolls, and buns, white buns are baked in units each of which weighs less than one-half pound after cooling.

(c) (1) When any optional ingredient permitted by paragraph (a) (13) of this section is used, except a vinegar and except monocalcium phosphate in a quantity less than 0.25 part for each 100 parts by weight of flour, the label shall bear the statement "_____ added to retard spoilage," the blank being filled in with the name by which the ingredient used is designated in such paragraph.

(2) When an optional ingredient permitted by paragraph (a) (14) of this section is used, the label shall bear the statement "spiced" or "spice added" or "with added spice"; but in lieu of the word "spice" in such statements, the common or usual name of the spice may be used.

(3) Wherever the name of the food appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the words and statements specified in this paragraph shall immediately and conspicuously precede or follow such name, without intervening written, printed, or graphic matter.

§ 17.2 *Enriched bread and enriched rolls or enriched buns; identity; label statement of optional ingredients.* (a)

Each of the foods enriched bread, enriched rolls, enriched buns conforms to the definition and standard of identity, and is subject to the requirements for label statement of optional ingredients, prescribed for bread by § 17.1 (a) and (c), except that:

(1) Each such food contains in each pound not less than 1.1 milligrams and not more than 1.8 milligrams of thiamine, not less than 0.7 milligram and not more than 1.6 milligrams of riboflavin, not less than 10.0 milligrams and not more than 15.0 milligrams of niacin or niacinamide, and not less than 8.0 milligrams and not more than 12.5 milligrams of iron (Fe).

(2) Each such food may also contain as an optional ingredient added vitamin D in such quantity that each pound of the finished food contains not less than 150 United States Pharmacopeia units and not more than 750 United States Pharmacopeia units of vitamin D.

(3) Each such food may also contain as an optional ingredient added harmless calcium salts in such quantity that each pound of the finished food contains not less than 300 milligrams and not more than 800 milligrams of calcium (Ca).

(4) Each such food may also contain as an optional ingredient wheat germ or partly defatted wheat germ; but the total quantity thereof, including any wheat germ or partly defatted wheat germ in any enriched flour used, is not more than 5 percent of the flour ingredient.

(5) Enriched flour may be used, in whole or in part, instead of flour.

(6) The limitation prescribed by § 17.1 (a) (2) on the quantity and composition of milk and dairy ingredients does not apply.

As used in this section, the term "flour," unqualified, includes bromated flour and phosphated flour; the term "enriched flour" includes enriched bromated flour. The prescribed quantity of any substance referred to in subparagraphs (1), (2), and (3) of this paragraph may be supplied, or partly supplied, through the use of enriched flour; through the direct addition of such substance under the conditions permitted by § 15.10 of this chapter for supplying such substance in the preparation of enriched flour; through the use of any ingredient containing such substance, which ingredient is required or permitted by § 17.1 (a) within the limits, if any, prescribed by such section, as modified by subparagraph (6) of this paragraph; through the use of wheat germ; or through any two or more of such methods.

(b) Enriched bread is baked in units each of which weighs one-half pound or more after cooling. Enriched rolls or enriched buns are baked in units each of which weighs less than one-half pound after cooling.

§ 17.3 *Milk bread and milk rolls or milk buns; identity; label statement of optional ingredients.* (a) Each of the foods milk bread, milk rolls, milk buns conforms to the definition and standard of identity, and is subject to the requirements for label statement of optional ingredients, prescribed for bread and rolls or buns by § 17.1 (a) and (c), except that:

(1) Milk is used as the sole moistening ingredient in preparing the dough; or in lieu of milk one or more of the dairy ingredients prescribed in paragraph (c) of this section is used, with or without water, in a quantity containing not less than 8.2 parts by weight of milk solids for each 100 parts by weight of flour used (including any bromated flour or phosphated flour used).

(2) No ingredient permitted by § 17.1 (a) (3) is used.

(b) Milk bread is baked in units each of which weighs one-half pound or more after cooling. Milk rolls or milk buns are baked in units each of which weighs less than one-half pound after cooling.

(c) The dairy ingredients referred to in paragraph (a) (1) of this section are concentrated milk, evaporated milk, sweetened condensed milk, dried milk, and a mixture of butter or cream or both with skim milk, concentrated skim milk, evaporated skim milk, sweetened condensed skim milk, sweetened condensed partly skimmed milk, nonfat dry milk solids, or any two or more of these, in such proportion that the weight of nonfat milk solids in such mixture is not more than 2.3 times and not less than 1.2 times the weight of the milk fat therein.

§ 17.4 *Raisin bread and raisin rolls or raisin buns; identity; label statement of optional ingredients.* (a) Each of the foods raisin bread, raisin rolls, raisin buns, conforms to the definition and standard of identity, and is subject to the requirements for label statement of optional ingredients, prescribed for bread and rolls or buns by § 17.1 (a) and (c), except that:

(1) Not less than 50 parts by weight of seeded or seedless raisins are used for each 100 parts by weight of flour used (including any bromated flour or phosphated flour used).

(2) Water extract of raisins may be used, but not to replace raisins.

(3) The baked units may bear icing or frosting.

(4) The limitation prescribed by § 17.1 (a) (2) on the quantity and composition of dairy ingredients does not apply.

(5) In determining its total solids, instead of following the direction "Grind sample just to pass 20-mesh sieve" (Official Methods of Analysis of the Association of Official Agricultural Chemists, Seventh Edition, 1950, page 209, section 13.70, under "Total Solids in an Entire Loaf of Bread,") comminute the sample by passing it twice through a food chopper.

(b) Raisin bread is baked in units each of which weighs one-half pound or more after cooling. Raisin rolls or raisin buns are baked in units each of which weighs less than one-half pound after cooling.

§ 17.5 *Whole wheat bread, graham bread, entire wheat bread, and whole wheat rolls, graham rolls, entire wheat rolls, or whole wheat buns, graham buns, entire wheat buns; identity; label statement of optional ingredients.* (a) Each of the foods whole wheat bread, graham bread, entire wheat bread, whole wheat rolls, graham rolls, entire wheat rolls, whole wheat buns, graham buns, entire wheat buns conforms to the definition and standard of identity, and is subject to the requirements for label statement of optional ingredients, prescribed for bread, rolls, and buns by § 17.1 (a) and (c), except that:

(1) The dough is made with whole wheat flour, and no flour is used therein.

(2) The limitation prescribed by § 17.1 (a) (2) on the quantity and composition of dairy ingredients does not apply.

(3) The total weight of calcium propionate, sodium propionate, or mixtures of these used is not more than 0.38 part for each 100 parts by weight of the whole wheat flour used.

As used in this section, the term "flour," unqualified, includes flour, enriched flour, bromated flour, enriched bromated flour, and phosphated flour; the term "whole wheat flour" includes whole wheat flour and bromated whole wheat flour. The potassium bromate in any bromated whole wheat flour used shall be deemed to be an optional ingredient in the whole wheat bread or whole wheat rolls.

(b) Whole wheat bread, graham bread, or entire wheat bread is baked in units each of which weighs one-half pound or more after cooling. Whole wheat rolls, graham rolls, entire wheat rolls, or whole wheat buns, graham buns, entire wheat buns are baked in units each of which weighs less than one-half pound after cooling.

Effective date. These regulations shall become effective 90 days from the date of publication of this order in the FEDERAL REGISTER, except that the provision of § 17.1 (a) (1) insofar as it permits the use of mono- and diglycerides of fat-forming fatty acids, including diacetyl tartaric acid esters of mono- and diglycerides of fat-forming fatty acids, is tentative and the record will remain open on this point to permit the introduction of new evidence on a date to be announced to show the effects of such articles as surface-active agents, and to show the results of the completed chronic toxicity experiments with diacetyl tartaric acid esters of mono- and diglycerides of fat-forming fatty acids.

Dated: May 12, 1952.

[SEAL] OSCAR R. EWING,
Administrator.

[F. R. Doc. 52-5369; Filed, May 14, 1952; 8:48 a. m.]

TITLE 26—INTERNAL REVENUE

Chapter I—Bureau of Internal Revenue, Department of the Treasury

REFERENCES TO CERTAIN OFFICERS IN REGULATIONS, RETURNS, ETC.

[T. D. 5900]

COLLECTORS, DEPUTY COLLECTORS, AND DISTRICT SUPERVISORS

In rules and regulations applicable to the Bureau of Internal Revenue and in returns, notices, mimeographs, instructions, circulars, or any other forms or publications of whatever nature pre-

scribed, furnished, or used in or by the Bureau of Internal Revenue,

(a) Reference to a collector of internal revenue shall be deemed to refer to a Director of Internal Revenue,

(b) Reference to a deputy collector shall be deemed to refer to an internal revenue agent, and

(c) Reference to a district supervisor shall be deemed to refer to an Assistant District Commissioner, Alcohol and Tobacco Tax,

insofar as these references pertain to a collector, deputy collector, or district supervisor in a territory embraced within the jurisdiction of any office of a District Commissioner established from time to time pursuant to Reorganization Plan No. 1 of 1952 (17 F. R. 2243).

Because the sole purpose of this Treasury decision is to conform the documents specified herein to Treasury Department Orders to be issued pursuant to Reorganization Plan No. 1 of 1952 (17 F. R. 2243), upon the effective dates of such orders, it is hereby found that it is unnecessary to issue this Treasury decision with notice and public procedure under section 4 (a) of the Administrative Procedure Act, approved June 11, 1946, or subject to the effective date limitations of section 4 (c) of said act.

This Treasury decision shall be effective upon its filing for publication in the FEDERAL REGISTER.

(53 Stat. 467; 26 U. S. C. 3791)

[SEAL] JOHN B. DUNLAP,
Commissioner of Internal Revenue.

Approved: May 13, 1952.

THOMAS J. LYNCH,
Acting Secretary of the Treasury.

[F. R. Doc. 52-5456; Filed, May 14, 1952; 9:57 a. m.]

PROPOSED RULE MAKING

DEPARTMENT OF AGRICULTURE

Production and Marketing Administration

[7 CFR Part 990]

[Docket No. AO-241]

HANDLING OF MILK IN NEW YORK-NEW JERSEY METROPOLITAN MARKETING AREA

PROPOSED MARKETING AGREEMENT AND ORDER

EDITORIAL NOTE: In F. R. Doc. 52-5171, appearing at page 4257 of the issue for Friday, May 9, 1952, "Part 927" in the bracket heading should have read "Part 990," as set forth above.

NOTICES

DEPARTMENT OF AGRICULTURE

Office of the Secretary

SALE OF MINERAL INTERESTS

REVISED AREA DESIGNATION

Schedule A, entitled Fair Market Value Areas, and Schedule B, entitled One Dollar Areas, accompanying the Secretary's order dated June 26, 1951 (16 F. R. 6318), are amended as follows:

In Schedule A, under Mississippi, in alphabetical order, add the county "Webster."

In Schedule B, under Mississippi, delete the county "Webster."

(Sec. 3, Public Law 760, 81st Cong.)

Done at Washington, D. C., this 13th day of May 1952.

[SEAL] CHARLES F. BRANNAN,
Secretary of Agriculture.

[F. R. Doc. 52-5463; Filed, May 13, 1952; 5:14 p. m.]

DEPARTMENT OF THE INTERIOR

Office of the Secretary

ALASKA

NOTICE FOR FILING OBJECTIONS TO ORDER WITHDRAWING PUBLIC LANDS FOR USE OF DEPARTMENT OF THE AIR FORCE FOR MILITARY PURPOSES [1]

For a period of 60 days from the date of publication of the above entitled order, persons having cause to object to the terms thereof may present their objections to the Secretary of the Interior. Such objections should be in writing, should be addressed to the Secretary of the Interior, and should be filed in duplicate in the Department of the Interior, Washington 25, D. C. In case any objection is filed and the nature of the opposition is such as to warrant it, a public hearing will be held at a convenient time and place, which will be announced, where opponents to the order may state their views and where the proponents of the order can explain its purpose, intent, and extent. Should any objection be filed, whether or not a hearing is held, notice of the determination by the Secretary as to whether the order should be rescinded, modified or let stand will be given to all interested parties of record and the general public.

OSCAR L. CHAPMAN,
Secretary of the Interior.

MAY 9, 1952.

[F. R. Doc. 52-5360; Filed, May 14, 1952; 8:46 a. m.]

[1] See F. R. Doc. 52-5359, Title 43, Chapter I, Appendix, *supra*.

ALASKA

NOTICE FOR FILING OBJECTIONS TO ORDER WITHDRAWING PUBLIC LANDS FOR TOWNSITE PURPOSES; REVOKING IN PART PUBLIC LAND ORDER NO. 46, OF OCTOBER 8, 1942 [1]

For a period of 60 days from the date of publication of the above entitled order, persons having cause to object to the terms thereof may present their objections to the Secretary of the Interior. Such objections should be in writing, should be addressed to the Secretary of the Interior, and should be filed in duplicate in the Department of the Interior, Washington 25, D. C. In case any objection is filed and the nature of the opposition is such as to warrant it, a public hearing will be held at a convenient time and place, which will be announced, where opponents to the order may state their views and where the proponents of the order can explain its purpose, intent, and extent. Should any objection be filed, whether or not a hearing is held, notice of the determination by the Secretary as to whether the order should be rescinded, modified or let stand will be given to all interested parties of record and the general public.

OSCAR L. CHAPMAN,
Secretary of the Interior.

MAY 9, 1952.

[F. R. Doc. 52-5358; Filed, May 14, 1952; 8:45 a. m.]

[1] See F. R. Doc. 52-5357, Title 43, Chapter I, appendix, *supra*.

DEPARTMENT OF COMMERCE

Federal Maritime Board

HAMBURG-AMERIKA LINIE AND NORDDEUTSCHER LLOYD

NOTICE OF AGREEMENT FILED FOR APPROVAL

Notice is hereby given that the following described agreement has been filed with the Board for approval pursuant to section 15 of the Shipping Act, 1916, as amended.

Agreement No. 7825 (Revised), between Hamburg-Amerika Linie and Norddeutscher Lloyd, provides for equal distribution between the parties of the total gross freight revenues derived from their services in the trade between United States ports and ports of Canada, Eire, United Kingdom of Great Britain and the continent of Europe, after deduction of all expenses directly connected with such services. The parties are to cooperate to arrange advertising and sailing schedules so as to avoid conflicting sailing dates whenever possible.

Interested parties may inspect this agreement and obtain copies thereof at the Regulation Office, Federal Maritime Board, Washington, D. C., and may submit, within 20 days after publication of this notice in the FEDERAL REGISTER, written statements with reference to this agreement and their position as to approval, disapproval, or modification,

together with request for hearing should such hearing be desired.

Dated: May 12, 1952.

By order of the Federal Maritime Board.

[SEAL] A. J. WILLIAMS, *Secretary.*

[F. R. Doc. 52-5394; Filed, May 14, 1952; 8:51 a. m.]

DEPARTMENT OF LABOR

Wage and Hour Division

LEARNER EMPLOYMENT CERTIFICATES

ISSUANCE TO VARIOUS INDUSTRIES

Notice is hereby given that pursuant to section 14 of the Fair Labor Standards Act of 1938, as amended (52 Stat. 1068, as amended; 29 U. S. C. and Sup. 214), and Part 522 of the regulations issued thereunder (29 CFR Part 522), special certificates authorizing the employment of learners at hourly wage rates lower than the minimum wage rates applicable under section 6 of the act have been issued to the firms listed below. The employment of learners under these certificates is limited to the terms and conditions therein contained and is subject to the provisions of Part 522. The effective and expiration dates, occupations, wage rates, number or proportion of learners, and learning period for certificates issued under the general learner regulations (§§ 522.1 to 522.14) are as indicated below; conditions provided in certificates issued under special industry regulations are as established in these regulations.

Single Pants, Shirts and Allied Garments, Women's Apparel, Sportswear and Other Odd Outerwear, Rainwear, Robes and Leather and Sheep-Lined Garments Divisions of the Apparel Industry Learner Regulations (29 CFR 522.160 to 522.166, as amended December 31, 1951; 16 F. R. 12043).

Carbon Sportswear Co., Oak and Walnut Streets, Tresckow, Pa., effective 4-30-52 to 4-29-53; 10 learners (women's blouses and dresses).

Catawba Garment Co., Inc., Catawba, N. C., effective 5-1-52 to 4-30-53; 10 learners (blouses).

Coley Original, Henderson, Tex., effective 5-5-52 to 5-4-53; 10 learners (ladies' blouses).

Ely & Walker Dry Goods Co., Ilmo, Mo., effective 4-30-52 to 4-29-53; 10 percent of the productive factory force (trousers).

Erlanger Manufacturing Co., Grand Prairie, Tex., effective 5-2-52 to 5-1-53; five learners (children's clothing).

The Giffin Manufacturing Co., Carlisle, Ky., effective 4-30-52 to 4-29-53; five learners for work on apparel products only (cotton and rayon undergarments).

Irene Sportswear Co., Inc., Main Street, Nicholson, Pa., effective 4-30-52 to 4-29-53; 10 learners (blouses).

Kane Manufacturing Co., Inc., Main Street, Leitchfield, Ky., effective 4-28-52 to 4-27-53; 10 percent of the productive factory force (jackets).

Little Star Frocks, Walnut and Orchard Street, Bridgeton, N. J., effective 5-4-52 to 5-3-53; 10 percent of the productive factory force (children's dresses).

McAdoo Manufacturing Co., Inc., South Hancock Street, McAdoo, Pa., effective 5-1-52 to 4-30-53; 10 learners (knitted outerwear).

M & M Dress Co., 410 Washington Avenue, Jermyn, Pa., effective 4-30-52 to 4-29-53; five learners (dresses).

Mayfair Frocks, Inc., 52 Twelfth Street, Fall River, Mass., effective 5-1-52 to 4-30-53; 10 percent of the productive factory force (ladies' cotton dresses).

Mildred Dress Co., 701 Washington Avenue, Jermyn, Pa., effective 5-3-52 to 5-2-53; five learners (ladies' dresses).

Arthur Moak Dress Co., 144 Hazle Street, Wilkes-Barre, Pa., effective 5-2-52 to 5-1-53; five learners; learners not to be engaged at subminimum wage rates in the manufacture of skirts (women's dresses, children's wear).

Mode O'Day Corp., 146 Southwest Temple, Salt Lake City, Utah, effective 5-2-52 to 5-1-53; 10 percent of the productive factory force (dresses).

National Pants Co., Beaver Falls, Pa., effective 5-1-52 to 4-30-53; 10 percent of the productive factory force (pants).

Oberman & Co., Arkadelphia, Ark., effective 5-2-52 to 11-1-52; 35 learners for expansion purposes (men's and boys' single pants).

Ravena Lingerie, Inc., Ravena, N. Y., effective 4-30-52 to 4-29-53; five learners (slips).

Albert Rosenblatt & Sons, Inc., Marble Street, West Rutland, Vt., effective 5-1-52 to 10-31-52; 35 learners for expansion purposes (dresses).

Schaefferstown Garment Co., Schaefferstown, Pa., effective 4-30-52 to 4-29-53; 10 percent of the productive factory force (men's and boys' cotton nightwear).

Valley Dress Co., 9 Pine Street, Pittston, Pa., effective 4-30-52 to 4-29-53; five learners (dresses and blouses).

Zulick's Underwear Mill, 128 Centre Avenue, Schuylkill Haven, Pa., effective 5-1-52 to 4-30-53; 10 learners (knitted outerwear, polo shirts, cardigans, creepers, blouses).

Cigar Industry Learner Regulations (29 CFR 522.201 to 522.211, as amended January 25, 1950; 15 F. R. 400).

General Cigar Co., Inc., Johnstone and Neville Streets, Perth Amboy, N. J., effective 5-7-52 to 5-6-53; 10 percent of the productive factory force engaged in the learner occupations; cigar machine operating, 320 hours; packing (cigars retailing for more than 6 cents), 320 hours; machine stripping, 160 hours; each 60 cents per hour.

Hosiery Industry Learner Regulations (29 CFR 522.40 to 522.51, as revised November 19, 1951; 16 F. R. 10733).

DeKalb Hosiery Mills, Inc., Fort Payne, Ala., effective 5-2-52 to 5-1-53; 5 percent of the productive factory force.

Fort Payne Hosiery Mills, Inc., Fort Payne, Ala., effective 5-2-52 to 5-1-53; 5 percent of the productive factory force.

Sulloway Hosiery Mills, Inc., Franklin, N. H., effective 5-2-52 to 5-1-53; 5 percent of the productive factory force.

Independent telephone Industry Learner Regulations (29 CFR 522.82 to 522.93, as amended January 25, 1950; 15 F. R. 398).

Iowa-Illinois Telephone Co., Donnellson, Iowa, effective 5-11-52 to 5-10-53.

Project Mutual Telephone & Electric Co., Inc., Rupert, Idaho, effective 5-1-52 to 4-30-53.

Knitted Wear Industry Learner Regulations (29 CFR 522.68 to 522.79, as amended January 21, 1952; 16 F. R. 12866).

Ashland Knitting Mills, Front and Chestnut Streets, Ashland, Pa., effective 4-30-52 to 4-29-53; 5 percent of the productive factory force (cotton knit underwear).

Bashore Knitting Mills, 536 Garfield Avenue, Schuylkill Haven, Pa., effective 4-29-52 to 4-28-53; five learners (knit underwear).

Louis Gallet Knitting Mills, Inc., Penn-Craft, East Millsboro, Pa., effective 5-1-52 to 4-30-53; five learners (knitted underwear).

Lehigh Underwear Mill, Inc., Main Street, Coopersburg, Pa., effective 5-2-52 to 5-1-53; five learners (underwear, athletic shirts, tee shirts).

Richland Knitting Mills, Inc., Richland, Pa., effective 5-2-52 to 5-1-53; five learners (men's tee shirts and ladies' slips).

Shoe Industry Learner Regulations (29 CFR 522.250 to 522.260, as amended March 17, 1952; 17 F. R. 1500).

Bailey Shoe Co., 11-15 East Concho, San Angelo, Tex., effective 4-28-52 to 4-27-53; six learners.

Regulations Applicable to the Employment of Learners (29 CFR 522.1 to 522.14).

Manell Sportswear, Inc., Paola, Kans., effective 5-5-52 to 9-4-52; 10 learners for expansion purposes; machine operators, pressers, handsewers, 480 hours each; 60 cents per hour for the first 240 hours and 65 cents per hour for the remaining 240 hours (overcoats and linings).

H. A. Seinsheimer Co., Fifteenth and Beeler Streets, New Albany, Ind., effective 4-30-52 to 4-29-53; 7 percent of the productive factory force; machine operating (except cutting), pressers, handsewers; 480 hours each; 60 cents per hour for the first 240 hours and 65 cents per hour for the remaining 240 hours (men's suits and overcoats).

Tiny Tot Bonnet Shop, 136 North 6 West, Provo, Utah, effective 4-29-52 to 4-28-53; 10 learners; sewing machine operators and trimmers; 240 hours at 65 cents per hour (felt and fabric millinery).

Each certificate has been issued upon the employer's representation that employment of learners at subminimum rates is necessary in order to prevent curtailment of opportunities for employment, and that experienced workers for the learner occupations are not available. The certificates may be canceled in the manner provided in the regulations and as indicated in the certificates. Any person aggrieved by the issuance of any of these certificates may seek a review or reconsideration thereof within fifteen days after publication of this notice in the FEDERAL REGISTER pursuant to the provisions of Part 522.

Signed at Washington, D. C., this 5th day of May 1952.

MILTON BROOKE,
Authorized Representative of the Administrator.

[F. R. Doc. 52-5361; Filed, May 14, 1952; 8:46 a. m.]

CIVIL AERONAUTICS BOARD

[Docket No. 5548]

LINEE AEREE ITALIANE, S. P. A.

NOTICE OF HEARING

In the matter of the application of Linee Aeree Italiane, S. P. A., pursuant to section 402 of the Civil Aeronautics Act of 1938, as amended, for an amendment of its foreign air carrier permit authorizing foreign air service to Paris, France, as an intermediate point on its route between Italy and the United States.

Notice is hereby given pursuant to the Civil Aeronautics Act of 1938, as

amended, particularly sections 402, 1001 and 1102 of said act, that public hearing in the above-entitled proceeding is assigned to be held on May 21, 1952 at 10:00 a. m. (e. d. t.) in Room E-210, Temporary Building No. 5, Sixteenth Street and Constitution Avenue NW., Washington, D. C., before Examiner Richard A. Walsh.

Without limiting the scope of the issues presented by said application, particular attention will be directed to the following matters and questions:

1. Whether the proposed air transportation will be in the public interest.

2. Whether the applicant is fit, willing and able to perform the proposed transportation and to conform to the provisions of the act and the rules, regulations, and requirements of the Board thereunder.

3. Whether the authorization of the proposed transportation is consistent with any obligation assumed by the United States in any treaty, convention, or agreement in force between the United States and Italy.

Notice is further given that any person desiring to be heard in this proceeding must file with the Board, on or before May 21, 1952, a statement setting forth the issues of fact or law raised by said application which he desires to controvert.

For further details of the service proposed and authorization requested, interested parties are referred to the application on file with the Civil Aeronautics Board.

Dated at Washington, D. C., May 9, 1952.

By the Civil Aeronautics Board.

[SEAL] FRANCIS W. BROWN, *Chief Examiner.*

[F. R. Doc. 52-5388; Filed, May 14, 1952; 8:51 a. m.]

FEDERAL POWER COMMISSION

[Docket No. E-6423]

KANSAS GAS AND ELECTRIC CO.

NOTICE OF ORDER AUTHORIZING ISSUANCE OF SHORT-TERM PROMISSORY NOTES

MAY 9, 1952.

Notice is hereby given that on May 6, 1952, the Federal Power Commission issued its order entered May 6, 1952, authorizing issuance of short-term promissory notes in the above-entitled matter.

[SEAL] LEON M. FUQUAY, *Secretary.*

[F. R. Doc. 52-5363; Filed, May 14, 1952; 8:47 a. m.]

[Docket Nos. G-1855, G-1867, G-1885]

SYLVANIA CORP. ET AL.

NOTICE OF FINDINGS AND ORDERS

MAY 9, 1952.

In the matters of The Sylvania Corporation, Docket No. G-1855; Cities Service Gas Company, Docket No. G-1867; Pennsylvania Gas Company, Docket No. G-1885.

Notice is hereby given that on May 8, 1952, the Federal Power Commission issued its orders entered May 6, 1952, issuing certificates of public convenience and necessity in the above-entitled matters.

[SEAL] LEON M. FUQUAY, *Secretary.*

[F. R. Doc. 52-5364; Filed, May 14, 1952; 8:47 a. m.]

[Docket No. G-1883]

TEXAS EASTERN TRANSMISSION CORP. AND TEXAS GAS TRANSMISSION CORP.

NOTICE OF ORDER PERMITTING WITHDRAWAL OF APPLICATION

MAY 9, 1952.

Notice is hereby given that on May 7, 1952, the Federal Power Commission issued its order entered May 1, 1952, permitting withdrawal of application in the above-entitled matter.

[SEAL] LEON M. FUQUAY, *Secretary.*

[F. R. Doc. 52-5365; Filed, May 14, 1952; 8:47 a. m.]

[Docket Nos. IT-5696, IT-5697, IT-5698]

ALUMINUM CO. OF AMERICA ET AL.

NOTICE OF CONTINUANCE OF HEARING

MAY 9, 1952.

In the matters of Aluminum Company of America and Knoxville Power Company, Docket Nos. IT-5696; Carolina Aluminum Company, IT-5697 and IT-5698.

Upon consideration of request filed May 7, 1952, by Counsel for Respondents for a continuance of the hearing now scheduled for June 9, 1952, in the above-designated matters;

Notice is hereby given that said hearing be and it is hereby postponed to August 25, 1952, at 10:00 a. m., e. d. s. t., in the Hearing Room of the Federal Power Commission, 1800 Pennsylvania Avenue NW., Washington, D. C.

[SEAL] LEON M. FUQUAY, *Secretary.*

[F. R. Doc. 52-5362; Filed, May 14, 1952; 8:46 a. m.]

[Project No. 2058]

WASHINGTON WATER POWER CO.

NOTICE OF ORDER APPROVING EXHIBITS AS PART OF LICENSE AND ADJUSTING ANNUAL CHARGES

MAY 9, 1952.

Notice is hereby given that on May 8, 1952, the Federal Power Commission issued its order entered May 6, 1952, approving Exhibits K and L as part of license and adjusting annual charges in the above-entitled matter.

[SEAL] LEON M. FUQUAY, *Secretary.*

[F. R. Doc. 52-5366; Filed, May 14, 1952; 8:47 a. m.]

[Project No. 2091]

SCOTT YOUNG

NOTICE OF ORDER ISSUING LICENSE (MINOR)

MAY 9, 1952.

Notice is hereby given that on March 14, 1952, the Federal Power Commission issued its order entered March 11, 1952, issuing license (Minor) in the above-entitled matter.

[SEAL] LEON M. FUQUAY, *Secretary.*

[F. R. Doc. 52-5367; Filed, May 14, 1952; 8:47 a. m.]

FEDERAL SECURITY AGENCY

Food and Drug Administration

[Docket No. FDC-31 (b)]

ATLAS POWDER CO. AND R. T. VANDERBILT CO. INC.

STANDARDS OF IDENTITY FOR BREAD AND ROLLS AND RELATED FOODS; MEMORANDUM DENYING MOTION TO REOPEN RECORD

In the matter of definitions and standards of identity for various types of bread and rolls, there was published in the FEDERAL REGISTER on August 8, 1950 (15 F. R. 5102) a notice of proposed rule making. A number of interested persons, including Atlas Powder Company and R. T. Vanderbilt Company, Inc., jointly (hereinafter referred to as Atlas), filed exceptions to the proposed order. All exceptions have been carefully considered and the proposed findings of fact and regulations have been modified in some respects. I have this day signed a final order.

Atlas also filed a motion to reopen the record for the purpose of introducing additional evidence. They have also filed several supplemental memoranda in support of the motion.

Atlas is interested in having recognized as optional ingredients in bread certain substances which have at times been referred to as surface-active agents, emulsifiers, or bread softeners. Atlas initially proposed three classes of substances called Spans, Tweens, and Myrjs, each of which includes a myriad of different compounds. The evidence introduced related to several such compounds. The basic chemical reaction whereby these compounds are produced is set forth in finding of fact 39 of the final order. Testimony by Atlas as to the functional use of these substances in bread dealt almost exclusively with a compound in the Myrj group, namely Myrj 45. The chemical name for this compound is polyoxyethylene monostearate. Atlas produces polyoxyethylene monostearate by reacting ethylene oxide directly with stearic acid. Another method used for producing polyoxyethylene monostearate is to react ethylene oxide with water to form a glycol and then reacting this glycol with stearic acid. A product made by this latter method, which is sold under the name of Sta-Soft, was proposed for use in bread by C. J. Patterson and Company, another interested party. None of the compounds proposed by Atlas are recognized

as optional ingredients for reasons which are fully stated in findings of fact 39–42.

Mono- and diglycerides of fat-forming fatty acids are surface-active agents. The proposed order recognized them as optional ingredients when used in, and not in excess of, 25 percent of the shortening.

The principal basis of Atlas' motion to reopen the record is that the proposed order which recognizes mono- and diglycerides and does not recognize their products discriminates against them. Discrimination is alleged in two respects: (1) The same softening effect can be produced in bread by using either mono- and diglycerides or the Atlas products, and this softening effect is equally deceptive to consumers; (2) different standards to prove safety have been applied to mono- and diglycerides and the Atlas products. Atlas' motion also is grounded upon the assertion that scientific work now in progress, which will be completed in about two years, will prove that its compounds are entirely safe. It asks that it be permitted to continue to supply its compounds for use in bread until the investigations can be completed, arguing that it has been shown that the compounds are safe enough to justify their continued use during the life of experiments now in progress.

ALLEGED DISCRIMINATION

In determining whether there has been discrimination as alleged, it is appropriate to look into the chemical and historical background of the substances in question.

Safety. Mono- and diglycerides are closely related to triglycerides, the basic component of natural fats. A triglyceride consists chemically of a combination of three molecules of fatty acids with one molecule of glycerine; a diglyceride consists of two molecules of fatty acids with one molecule of glycerine; and a monoglyceride consists of one molecule of fatty acids with one molecule of glycerine. While natural fats are predominantly triglycerides, they also contain small amounts of mono- and diglycerides. Mono- and diglycerides can be produced by reacting triglycerides with glycerine. It is known that mono- and diglycerides have been used in food for at least 20 years. They are permitted as an optional ingredient in the definition and standard of identity for oleomargarine (21 CFR 45.0 (a) (9)). They were recognized in the proposed order which was issued in 1943 as the result of earlier hearings held in connection with standards for bread. (See 8 F. R. 10780.)

In the course of the bread hearings no questions were raised by Atlas or any other interested party concerning the safety of mono- and diglycerides. The testimony on the subject is not extensive, but such as there is in the record is favorable to them. There is testimony to the effect that monoglycerides and diglycerides of fatty acids are intermediate products in the digestion of triglycerides; that mono- and diglycerides are normally formed in large quantities in the digestive processes; that all experimental evidence indicated that they are a wholesome food product and at least as easy to digest as triglycerides. There was also testimony to the effect that mono- and diglycerides are utilized in the body in a manner similar to triglycerides and that they are used either as mono- and diglycerides or broken down to basic constituents of glycerine and fatty acid before being assimilated through the intestinal wall; that there is nothing about mono- and diglycerides which is deleterious to health and that it has been established scientifically and by common usage over a number of years that these products are absolutely nontoxic.

In the preparation of some of the Atlas products, including polyoxyethylene monostearate, the compound most widely recommended for use in bread, ethylene oxide is used. Anyone trained in chemistry or pharmacology would immediately recognize the close relationship between ethylene oxide and poisonous glycols, and suspicion would be aroused that a substance produced by the use of ethylene oxide might be unsuitable for use in food. It was but a few years ago that the elixir sulfanilamide episode took place in which there were a number of deaths caused by the ingestion of a member of the same class of glycols, namely diethylene glycol, which had been used in a drug preparation.

The scientific staff of Atlas was obviously aware of the close relationship between the ethylene oxide in their product and the poisonous glycols. Before they placed Myrj 45 on the market in 1947, they had some pharmacological work carried out with a number of substances with which they were experimenting. The results of this work were discussed with members of the Food and Drug Administration who were of the opinion that the work done to establish safety of the materials was not adequate. Pharmacological work continued, but in the meantime the product was put on the market for use in bread. It is now argued that though the work is still incomplete the product should continue to be used in bread in the trust that the work will be favorable to the Atlas product. In the baking industry the introduction of Myrj 45 and related substances into bread was questioned. The American Institute of Baking issued warnings to bakers that the safety of the material had not been established and that they would be ill-advised to use the preparation at that time.

Questions concerning the suitability for use in bread and safety of polyoxyethylene monostearate and other Atlas products were raised when the bread hearing opened in 1948. Testimony on these questions consumed a major portion of the hearing. Atlas and others who were promoting the use of such products recognized the burden of showing the suitability and safety of these products. They appeared to accept without question the responsibility of showing that their products made from glycols were not toxic.

Thus, on the one hand we have mono- and diglycerides, a substance which is closely related to natural fats, concerning which no questions of safety were raised, and on the other hand we have a group of products which are closely related to substances known to be toxic, concerning which numerous questions of safety were raised. In considering the possible toxicity of substances to be used in foods, it is important to take into consideration their chemical structure and their relationship to other substances concerning which there is knowledge of toxicity. For reasons which are fully set forth in the findings of fact, I have concluded that the evidence does not warrant the recognition of the Atlas products as optional ingredients in bread.

There is nothing in the record which throws any doubts on the safety of mono- and diglycerides. In their motion to reopen the record and in the supplemental memoranda Atlas does not question the safety of mono- and diglycerides for use in bread. On the contrary, they state that mono- and diglycerides are safe for such use. However, since the record in the bread hearing closed, the Food Protection Committee of the National Research Council, a highly reputable organization with semiofficial status, has pointed out that questions exist concerning the use over a long period of time of surface-active agents in general. These include mono- and diglycerides. In view of the action of the Food Protection Committee, it appears that an opportunity should be given to interested persons to introduce evidence as to the properties of mono- and diglycerides which may have a bearing on their suitability for use in bread. The order which I have issued permits the use of mono- and diglycerides on a tentative basis. I intend to announce in the near future a hearing to take further evidence on this point. However, because of the composition of mono- and diglycerides and the history of their use, I do not deem it reasonable to preclude their use pending such hearing and evaluation of the evidence.

Hachmeister, Inc., offered some evidence in support of the admission of its product known as TEM, diacetyl tartaric acid ester of mono- and diglycerides. However, the work necessary to prove safety had not been completed when the hearing was closed. Hachmeister attached to its exceptions supplemental data showing that the work now has been completed and tending to show that the product is safe for use in bread. Since its investigational work appears to be complete, Hachmeister's position is significantly different from that of Atlas. At the reopened hearing, Hachmeister, Inc., will be given an opportunity to present evidence to show the results of its completed investigational work. However, the same questions with respect to the surface-active effects of the product will have to be explored.

I do not accept the proposal that the public should continue to get the Atlas products in bread while the company completes the necessary scientific work

to resolve all questions as to the likelihood of harm from them. The scientific investigations shown in the bread record are inadequate, as the findings point out, and Atlas seems to recognize this from the fact that it has filed affidavits since the close of the hearing outlining investigations in progress and planned.

After I had had the matter for study for some time, Atlas filed still another memorandum requesting that I consider not only the 17,000 page record before me, but also the very substantial record in the ice cream hearing now in progress. That memorandum is made up primarily of excerpts from the testimony of Dr. Peter Kass, Atlas' Director of Research. He reviews the testimony of Atlas' witnesses, much of which had to do with products other than Span 60, Tween 60, and Myrj 45, and he argues the invalidity of certain conclusions reached by the National Research Council's Food Protection Committee and expresses his own opinion on the evidence adduced at the ice cream hearing. Dr. Kass' conclusions depend in part on the life-span studies reported by Dr. Krantz. Some of that work is discussed in finding 41. While I cannot undertake a thorough review of the ice cream record at this time, especially in view of the conceded facts that the record is incomplete and that only five of the 16 Atlas witnesses who have appeared thus far to give pharmacological testimony have been cross-examined, it is sufficient to say that if upon a final consideration of the completed record in the ice cream hearing it is found that there is no likelihood of harm from the Atlas products in that food and it can be said that new and relevant investigations have been completed which may change the result on the bread standards, it will then be time enough for Atlas to petition to reopen this record. It should not be done when it appears that the scientific experiments are still incomplete in important respects.

Softening effect. The proposed order recognized that the use of excessive amounts of mono- and diglycerides in the shortening could produce a softening effect in the finished bread which might be deceptive to consumers. The proposed order limited mono- and diglycerides in bread to 25 percent of the shortening. Further study of the record has been made in the light of the exceptions and the permitted amount of mono- and diglycerides that may be used in combination with the shortening has been further restricted, as fully set forth in finding of fact 5. Based on the evidence of record, the use of mono- and diglycerides in the amounts permitted will not produce breads which are deceptive to consumers.

The motion of Atlas Powder Company and R. T. Vanderbilt Co., Inc., to reopen the hearing is denied.

Dated at Washington, D. C., the 12th day of May 1952.

[SEAL] OSCAR R. EWING,
Administrator.

[F. R. Doc. 52-5368; Filed, May 14, 1952; 8:48 a. m.]

HOUSING AND HOME FINANCE AGENCY

Office of the Administrator

REGIONAL REPRESENTATIVES, AND AREA REPRESENTATIVE, SAVANNAH RIVER AREA OFFICE

DELEGATION OF AUTHORITY WITH RESPECT TO PERFORMANCE OF CERTAIN FUNCTIONS IN CONNECTION WITH APPROVED DEFENSE COMMUNITY FACILITIES PROJECTS

1. Each Regional Representative of the Office of the Administrator Field Service, the Area Representative in charge of the Savannah River Area Office, and each person serving, pursuant to due authorization, as an Acting Regional Representative is hereby authorized to take the following actions, on behalf of the Administrator, in connection with defense community facilities projects to be financed in whole or in part by the Housing and Home Finance Agency under the authority of section 304, Title III, Public Law 139, 82d Congress (Defense Housing and Community Facilities and Services Act of 1951, approved September 1, 1951):

A. Execute offers to public and nonprofit agencies, for projects and in amounts approved by the Housing and Home Finance Administrator;

B. Execute waivers with respect to contracts resulting from acceptance of offers of the type described in subparagraph A above; and

C. Authorize payments under any contracts (including amendatory, supplementary and superseding contracts) resulting from acceptance of offers of the type described in subparagraph A above.

2. The authority hereby delegated shall be exercised under the general supervision of the Administrator and in conformity with applicable law, orders and regulations.

3. The authority herein delegated may not be redelegated.

(Reorg. Plan No. 3 of 1947, 61 Stat. 954 (1947); 62 Stat. 1268, 1283 (1948), as amended, 12 U. S. C., Sup. IV 1701c; 63 Stat. 413, 440 (1949), 12 U. S. C. Sup. IV 1701d-1; Pub. Law 139, 82d Cong., approved Sept. 1, 1951; Executive Order No. 10296, 16 F. R. 10103-6 (Oct. 4, 1951))

Effective as of the first day of May 1952.

RAYMOND M. FOLEY,
Housing and Home Finance Administrator.

[F. R. Doc. 52-5389; Filed, May 14, 1952; 8:51 a. m.]

OFFICE OF DEFENSE MOBILIZATION

[RC 46; No. 362]

LEA COUNTY, NEW MEXICO, AREA

DETERMINATION AND CERTIFICATION OF A CRITICAL DEFENSE HOUSING AREA

MAY 14, 1952.

Upon specific data which has been prescribed by and presented to the Secretary of Defense and the Director of Defense Mobilization and on the basis of other information available in the discharge of their official duties, the undersigned find that the conditions required by section 204 (1) of the Housing and Rent Act of 1947, as amended, exist in the area designated as

Lea County, New Mexico, Area. (The area consists of Lea County, New Mexico.)

Therefore, pursuant to section 204 (1) of the Housing and Rent Act of 1947, as amended, and Executive Order 10276 of July 31, 1951, the undersigned jointly determine and certify that the aforementioned area is a critical defense housing area.

ROBERT A. LOVETT,
Secretary of Defense.
JOHN R. STEELMAN,
Acting Director of Defense Mobilization.

[F. R. Doc. 52-5475; Filed, May 14, 1952; 11:11 a. m.]

[RC 46; No. 176]

BRIDGEPORT, WASHINGTON, AREA

DETERMINATION AND CERTIFICATION OF A CRITICAL DEFENSE HOUSING AREA

MAY 14, 1952.

Upon specific data which has been prescribed by and presented to the Secretary of Defense and the Director of Defense Mobilization and on the basis of other information available in the discharge of their official duties, the undersigned find that the conditions required by section 204 (1) of the Housing and Rent Act of 1947, as amended, exist in the area designated as

Bridgeport, Washington, Area. (The area consists of Census Division 2, including the Town of Bridgeport in Douglas County, and Census Division 8, including the Towns of Brewster and Pateros in Okanagon County, Washington.)

Therefore, pursuant to section 204 (1) of the Housing and Rent Act of 1947, as amended, and Executive Order 10276 of July 31, 1951, the undersigned jointly determine and certify that the aforementioned area is a critical defense housing area.

ROBERT A. LOVETT,
Secretary of Defense.
JOHN R. STEELMAN,
Acting Director of Defense Mobilization.

[F. R. Doc. 52-5476; Filed, May 14, 1952; 11:11 a. m.]

[RC 46; No. 357]

WENATCHEE, WASHINGTON, AREA

DETERMINATION AND CERTIFICATION OF A CRITICAL DEFENSE HOUSING AREA

MAY 14, 1952.

Upon specific data which has been prescribed by and presented to the Secretary of Defense and the Director of Defense Mobilization and on the basis of other information available in the discharge of their official duties, the undersigned find

that the conditions required by section 204 (l) of the Housing and Rent Act of 1947, as amended, exist in the area designated as

Wenatchee, Washington, Area. (The area consists of the election precincts of Appleyard, Canyon, Lewis and Clark, Lincoln, Malaga, Millerdale, Monitor, Sunny Slope, Suburban, and all Wenatchee City election precincts, in Chelan County; and the election precincts of Cascade, East Wenatchee, Highline, Majestic, North Bridge, Rock Island, South Bridge and Valley in Douglas County; all in the State of Washington.)

Therefore, pursuant to section 204 (l) of the Housing and Rent Act of 1947, as amended, and Executive Order 10276 of July 31, 1951, the undersigned jointly determine and certify that the aforementioned area is a critical defense housing area.

ROBERT A. LOVETT,
Secretary of Defense.
JOHN R. STEELMAN,
Acting Director of Defense Mobilization.

[F. R. Doc. 52-5477; Filed, May 14, 1952; 11:11 a. m.]

SECURITIES AND EXCHANGE COMMISSION

[File No. 70-2850]

CENTRAL VERMONT PUBLIC SERVICE CORP.

ORDER AUTHORIZING ISSUANCE AND SALE OF BONDS AND SHARES OF COMMON STOCK SUBJECT TO RESULTS OF COMPETITIVE BIDDING

MAY 9, 1952.

Central Vermont Public Service Corporation ("Central Vermont"), a public utility subsidiary of New England Public Service Company, a registered holding company, having filed an application, and amendments thereto, pursuant to the third sentence of section 6 (b) of the Public Utility Holding Company Act of 1935 ("act") and Rule U-50 promulgated thereunder, with respect to the following transactions:

Central Vermont proposes to issue and sell, pursuant to the competitive bidding requirements of Rule U-50, $1,500,000 principal amount of First Mortgage ____ Percent Bonds, Series H, due 1982. The bonds will be issued under and secured by a Mortgage to Old Colony Trust Company, as Trustee, dated as of October 1, 1929, as supplemented by various supplemental indentures, including a proposed supplemental indenture to be dated as of May 1, 1952. The interest rate, the public offering price and other pertinent details will be supplied by amendment.

Central Vermont also proposes to issue and sell 108,900 additional shares of Common Stock, $6 par value. The Commission, by order dated April 15, 1952, authorized the company, among other things, to amend its Articles of Association by changing its authorized common stock without par value to $6 par value and to solicit its common stockholders in favor of the adoption of the amendment at its annual meeting to be held May 6, 1952, or any adjournment thereof (Holding Company Act Release No. 11181). It is stated that the common stockholders approved said amendment on May 6, 1952, and that, effective May 16, 1952, the authorized shares of common stock (including the 653,400 shares then outstanding) will be changed from shares without par value to shares with a par value of $6 per share.

The additional shares of common stock will first be offered to holders of the company's common stock by the issuance of transferable warrants evidencing the right to subscribe for one share of additional common stock for each six shares of common stock then held by them. It is expected that subscription warrants will be mailed on May 20, 1952, and will expire at 3 p. m., e. d. s. t., on June 3, 1952. No fractional shares of additional common stock will be issued but fractional share warrants may be combined with other warrants so as to represent in the aggregate the right to purchase one or more shares of additional common stock.

NEPSCO, holder of 35.5 percent of Central Vermont's outstanding common stock, has advised Central Vermont that it will waive its subscription right and surrender its subscription warrant to the company for cancellation, thereby making 38,611 shares of the additional common stock available for delivery to the successful bidders prior to the expiration date of the warrants. The price to be paid to the company for the unsubscribed shares and the shares for which NEPSCO has waived its right, which shall also be the subscription price to the above stockholders, and the amount of compensation to be paid the underwriters will be determined at competitive bidding under Rule U-50.

The applicant requests that the ten day period for publicly inviting bids for the purchase of the bonds and common stock, specified in Rule U-50, be shortened to a period of not less than six days.

The application states that the bonds and common stock will be offered for sale separately and that in no case will the sale of the particular security be subject to or contingent upon the sale of the other security.

The net proceeds to be received from the sale of the common stock and bonds (after deducting $1,000,000 to be deposited in the first instance with the Trustee under the Mortgage) will be used for construction expenditures, including reduction of short-term indebtedness incurred for the interim financing thereof. It is expected that the cash initially deposited with the Trustee will be withdrawn before December 31, 1952, and short-term indebtedness (aggregating $1,050,000 as at April 30, 1952) will have been reduced to $250,000 by that date.

Fees and expenses (exclusive of underwriting commissions and expenses) to be incurred by Central Vermont in connection with the proposed transactions are estimated at $23,280 for the bonds and $24,845 for the common stock, including legal fees of $12,000. The fees and expenses of independent counsel for the underwriters will be paid by the successful bidders, except the company proposes to pay certain Blue Sky Law expense incurred in connection with the sales of bonds and common stock up to but not exceeding $1,250. The applicant requests that the Commission's order herein become effective upon its issuance.

Due notice having been given of the filing of the application, as amended, and a hearing not having been requested of or ordered by the Commission; and

It appearing that the Public Service Commission of Vermont, the State Commission of the State in which Central Vermont is organized and doing business, has, by order dated May 5, 1952, expressly authorized the issuance and sale of the bonds and common stock, subject to a reservation of jurisdiction with respect to the results of competitive bidding; and

It further appearing that the record is incomplete with respect to the fees and expenses incurred or to be incurred in connection with the proposed transactions, and the Commission deeming it appropriate to reserve jurisdiction with respect to such fees and expenses; and

The Commission finding with respect to said application, as amended, that the applicable provisions of the act and the rules promulgated thereunder are satisfied and that it is not necessary to impose any terms and conditions, other than those set forth below, and deeming it appropriate in the public interest and in the interest of investors and consumers that said application, as amended, be granted, effective forthwith, and the Commission also deeming it appropriate that applicant's request to shorten the bidding period be granted:

It is ordered, Pursuant to Rule U-23 and the applicable provisions of the act, that said application, as amended, be, and it hereby is, granted, effective forthwith, subject to the terms and conditions prescribed in Rule U-24 and to the following additional terms and conditions:

(1) That the proposed sales of bonds and common stock by Central Vermont shall not be consummated until the results of competitive bidding, pursuant to Rule U-50, and a final order of the Public Service Commission of Vermont approving same, shall have been made a matter of record in this proceeding and a further order entered by this Commission in the light of the record so completed, which order may contain such further terms and conditions as may then be deemed appropriate, jurisdiction being reserved for such purpose;

(2) That jurisdiction be, and hereby is, reserved with respect to the payment of all fees and expenses incurred or to be incurred in connection with the proposed transactions.

It is further ordered, That the ten day period for publicly inviting bids for the purchase of the bonds and common stock, specified in Rule U-50, be, and the same hereby is, shortened to a period of not less than six days.

By the Commission.

[SEAL] ORVAL L. DUBOIS,
Secretary.

[F. R. Doc. 52-5370; Filed, May 14, 1952; 8:48 a. m.]

INTERSTATE COMMERCE COMMISSION

[4th Sec. Application 27041]

CORN SYRUP FROM POINTS IN CENTRAL AND ILLINOIS TERRITORIES TO NORTH ATLANTIC PORTS

APPLICATION FOR RELIEF

MAY 12, 1952.

The Commission is in receipt of the above-entitled and numbered application for relief from the long-and-short-haul provision of section 4 (1) of the Interstate Commerce Act.

Filed by: L. C. Schuldt, Agent, for carriers parties to his tariff I. C. C. No. 3758.

Commodities involved: Corn syrup and related articles, carloads.

From: Points in central and Illinois territories.

To: North Atlantic ports (for export).

Grounds for relief: Circuitous routes and to maintain port rate relations.

Any interested person desiring the Commission to hold a hearing upon such application shall request the Commission in writing so to do within 15 days from the date of this notice. As provided by the general rules of practice of the Commission, Rule 73, persons other than applicants should fairly disclose their interest, and the position they intend to take at the hearing with respect to the application. Otherwise the Commission, in its discretion, may proceed to investigate and determine the matters involved in such application without further or formal hearing. If because of an emergency a grant of temporary relief is found to be necessary before the expiration of the 15-day period, a hearing, upon a request filed within that period, may be held subsequently.

By the Commission, Division 2.

[SEAL] W. P. BARTEL, *Secretary.*

[F. R. Doc. 52-5377; Filed, May 14, 1952; 8:48 a. m.]

[4th Sec. Application 27042]

FOREIGN WOODS FROM LANDRUM, S. C., TO SOUTHERN TERRITORY

APPLICATION FOR RELIEF

MAY 12, 1952.

The Commission is in receipt of the above-entitled and numbered application for relief from the long-and-short-haul provision of section 4 (1) of the Interstate Commerce Act.

Filed by: J. G. Kerr, Agent, for carriers parties to Agent C. A. Spaninger's tariff I. C. C. No. 1226.

Commodities involved: Lumber, logs, flitches or piling, of foreign woods, built-up woods, veneer, and dimension stock, carloads.

From: Landrum, S. C.

To: Points in southern territory.

Grounds for relief: Competition with rail carriers, circuitous routes, and to maintain grouping.

Schedules filed containing proposed rates: C. A. Spaninger, Agent, I. C. C. No. 1226, Supp. 26.

Any interested person desiring the Commission to hold a hearing upon such application shall request the Commission in writing so to do within 15 days from the date of this notice. As provided by the general rules of practice of the Commission, Rule 73, persons other than applicants should fairly disclose their interest, and the position they intend to take at the hearing with respect to the application. Otherwise the Commission, in its discretion, may proceed to investigate and determine the matters involved in such application without further or formal hearing. If because of an emergency a grant of temporary relief is found to be necessary before the expiration of the 15-day period, a hearing, upon a request filed within that period, may be held subsequently.

By the Commission, Division 2.

[SEAL] W. P. BARTEL, *Secretary.*

[F. R. Doc. 52-5378; Filed, May 14, 1952; 8:48 a. m.]

[4th Sec. Application 27043]

SLAG FROM ENSLEY, ALA., TO ATLANTA, EAST POINT, AND FORT MCPHERSON, GA.

APPLICATION FOR RELIEF

MAY 12, 1952.

The Commission is in receipt of the above-entitled and numbered application for relief from the long-and-short-haul provision of section 4 (1) of the Interstate Commerce Act.

Filed by: J. G. Kerr, Agent, for the Birmingham Southern Railroad Company and Central of Georgia Railway Company.

Commodities involved: Slag, carloads.

From: Ensley, Ala.

To: Atlanta, East Point, and Fort McPherson, Ga.

Grounds for relief: Competition with rail carriers and circuitous routes.

Schedules filed containing proposed rates: C. A. Spaninger, Agent, I. C. C. No. 998, Supp. 200.

Any interested person desiring the Commission to hold a hearing upon such application shall request the Commission in writing so to do within 15 days from the date of this notice. As provided by the general rules of practice of the Commission, Rule 73, persons other than applicants should fairly disclose their interest, and the position they intend to take at the hearing with respect to the application. Otherwise the Commission, in its discretion, may proceed to investigate and determine the matters involved in such application without further or formal hearing. If because of an emergency a grant of temporary relief is found to be necessary before the expiration of the 15-day period, a hearing, upon a request filed within that period, may be held subsequently.

By the Commission, Division 2.

[SEAL] W. P. BARTEL, *Secretary.*

[F. R. Doc. 52-5379; Filed, May 14, 1952; 8:48 a. m.]

[4th Sec. Application 27044]

IRON AND STEEL ARTICLES FROM POINTS IN OFFICIAL TERRITORY TO ROCKY AND PLASTIC, COLO.

APPLICATION FOR RELIEF

MAY 12, 1952.

The Commission is in receipt of the above-entitled and numbered application for relief from the long-and-short-haul provision of section 4 (1) of the Interstate Commerce Act.

Filed by: L. E. Kipp, Agent, for carriers parties to schedules listed below.

Commodities involved: Iron and steel articles, carloads.

From: Points in official territory.

To: Rocky and Plastic, Colo.

Grounds for relief: Competition with rail carriers, circuitous routes, to maintain grouping, and to apply rates constructed on the basis of the short line distance formula.

Schedules filed containing proposed rates: I. N. Doe, Agent, I. C. C. No. 604, Supp. 14; C. W. Boin, Agent, I. C. C. No. A-814, Supp. 45; L. C. Schuldt, Agent, I. C. C. No. 4211, Supp. 13.

Any interested person desiring the Commission to hold a hearing upon such application shall request the Commission in writing so to do within 15 days from the date of this notice. As provided by the general rules of practice of the Commission, Rule 73, persons other than applicants should fairly disclose their interest, and the position they intend to take at the hearing with respect to the application. Otherwise the Commission, in its discretion, may proceed to investigate and determine the matters involved in such application without further or formal hearing. If because of an emergency a grant of temporary relief is found to be necessary before the expiration of the 15-day period, a hearing, upon a request filed within that period, may be held subsequently.

By the Commission, Division 2.

[SEAL] W. P. BARTEL, *Secretary.*

[F. R. Doc. 52-5380; Filed, May 14, 1952; 8:49 a. m.]

[4th Sec. Application 27045]

ACID AND ACETIC ANHYDRIDE FROM KINGS MILL, TEX., TO CELCO AND PEARISBURG, VA., AND AMCELLE, MD.

APPLICATION FOR RELIEF

MAY 12, 1952.

The Commission is in receipt of the above-entitled and numbered application for relief from the long-and-short-haul provision of section 4 (1) of the Interstate Commerce Act.

Filed by: F. C. Kratzmeir, Agent, for carriers parties to his tariff I. C. C. No. 3967.

Commodities involved: Acid, acetic, glacial or liquid, and acetic anhydride, in tank-car loads.

From: Kings Mill, Tex.

To: Celco and Pearisburg, Va., and Amcelle, Md.

Grounds for relief: Competition with rail carriers and circuitous routes.

Schedules filed containing proposed rates: F. C. Kratzmeir, Agent, I. C. C. No. 3967, Supp. 113.

Any interested person desiring the Commission to hold a hearing upon such application shall request the Commission in writing so to do within 15 days from the date of this notice. As provided by the general rules of practice of the Commission, Rule 73, persons other than applicants should fairly disclose their interest, and the position they intend to take at the hearing with respect to the application. Otherwise the Commission, in its discretion, may proceed to investigate and determine the matters involved in such application without further or formal hearing. If because of an emergency a grant of temporary relief is found to be necessary before the expiration of the 15-day period, a hearing, upon a request filed within that period, may be held subsequently.

By the Commission, Division 2.

[SEAL] W. P. BARTEL, *Secretary.*

[F. R. Doc. 52-5381; Filed, May 14, 1952; 8:49 a. m.]